

NCD DRILLS

High performance solid carbide drill series

A - TURNING

B - THREADING

C - GROOVING

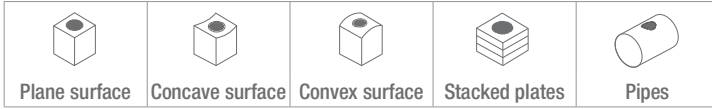
D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

APPLICATION



ISO APPLICATION FIELDS

P M K S

ADVANTAGES AND CHARACTERISTICS

- Premium quality delivering top class performance
- Suitable for different types of holes and surfaces on diverse materials
- Twisted flute style with or without coolant available in 3xD and 5xD as standards, for other sizes and step drills we can provide as special
- Cutting parameters available on smart phone



• Range

- D3-20mm, 3xD and 5xD, with and without coolant
- Special length and step drill available upon request

• Geometries

- GP for general purpose, wide application range
- SC for reduced cutting force and smooth cutting



NCD3-GP

NCD

- First choice for steel and cast iron machining (<45 HRC)
- **Without** coolant holes
- Self centering geometry for accurate holes
- AlTiN-nano based coating for long lasting tool life

3xD

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG			
NCD3-GP 0300-062/020-S06	●	3	3	14	20	62	6	140°			
NCD3-GP 0310-062/020-S06	●	3.1	3	14	20	62	6	140°			
NCD3-GP 0320-062/020-S06	●	3.2	3	14	20	62	6	140°			
NCD3-GP 0330-062/020-S06	●	3.3	3	14	20	62	6	140°			
NCD3-GP 0340-062/020-S06	●	3.4	3	14	20	62	6	140°			
NCD3-GP 0350-062/020-S06	●	3.5	3	14	20	62	6	140°			
NCD3-GP 0360-062/020-S06	●	3.6	3	14	20	62	6	140°			
NCD3-GP 0370-062/020-S06	●	3.7	3	14	20	62	6	140°			
NCD3-GP 0380-066/024-S06	●	3.8	3	17	24	66	6	140°			
NCD3-GP 0390-066/024-S06	●	3.9	3	17	24	66	6	140°			
NCD3-GP 0400-066/024-S06	●	4	3	17	24	66	6	140°			
NCD3-GP 0410-066/024-S06	●	4.1	3	17	24	66	6	140°			
NCD3-GP 0420-066/024-S06	●	4.2	3	17	24	66	6	140°			
NCD3-GP 0430-066/024-S06	●	4.3	3	17	24	66	6	140°			
NCD3-GP 0440-066/024-S06	●	4.4	3	17	24	66	6	140°			
NCD3-GP 0450-066/024-S06	●	4.5	3	17	24	66	6	140°			
NCD3-GP 0460-066/024-S06	●	4.6	3	17	24	66	6	140°			
NCD3-GP 0470-066/024-S06	●	4.7	3	17	24	66	6	140°			
NCD3-GP 0480-066/028-S06	●	4.8	3	20	28	66	6	140°			
NCD3-GP 0490-066/028-S06	●	4.9	3	20	28	66	6	140°			
NCD3-GP 0500-066/028-S06	●	5	3	20	28	66	6	140°			
NCD3-GP 0510-066/028-S06	●	5.1	3	20	28	66	6	140°			
NCD3-GP 0520-066/028-S06	●	5.2	3	20	28	66	6	140°			
NCD3-GP 0530-066/028-S06	●	5.3	3	20	28	66	6	140°			
NCD3-GP 0540-066/028-S06	●	5.4	3	20	28	66	6	140°			
NCD3-GP 0550-066/028-S06	●	5.5	3	20	28	66	6	140°			
NCD3-GP 0560-066/028-S06	●	5.6	3	20	28	66	6	140°			
NCD3-GP 0570-066/028-S06	●	5.7	3	20	28	66	6	140°			
NCD3-GP 0580-066/028-S06	●	5.8	3	20	28	66	6	140°			
NCD3-GP 0590-066/028-S06	●	5.9	3	20	28	66	6	140°			
NCD3-GP 0600-066/028-S06	●	6	3	20	28	66	6	140°			
NCD3-GP 0610-079/034-S08	●	6.1	3	24	34	79	8	140°			
NCD3-GP 0620-079/034-S08	●	6.2	3	24	34	79	8	140°			
NCD3-GP 0630-079/034-S08	●	6.3	3	24	34	79	8	140°			
NCD3-GP 0640-079/034-S08	●	6.4	3	24	34	79	8	140°			
NCD3-GP 0650-079/034-S08	●	6.5	3	24	34	79	8	140°			
NCD3-GP 0660-079/034-S08	●	6.6	3	24	34	79	8	140°			
NCD3-GP 0670-079/034-S08	●	6.7	3	24	34	79	8	140°			
NCD3-GP 0680-079/034-S08	●	6.8	3	24	34	79	8	140°			
NCD3-GP 0690-079/034-S08	●	6.9	3	24	34	79	8	140°			
NCD3-GP 0700-079/034-S08	●	7	3	24	34	79	8	140°			
NCD3-GP 0710-079/041-S08	●	7.1	3	29	41	79	8	140°			
NCD3-GP 0720-079/041-S08	●	7.2	3	29	41	79	8	140°			
NCD3-GP 0730-079/041-S08	●	7.3	3	29	41	79	8	140°			
NCD3-GP 0740-079/041-S08	●	7.4	3	29	41	79	8	140°			
NCD3-GP 0750-079/041-S08	●	7.5	3	29	41	79	8	140°			
NCD3-GP 0760-079/041-S08	●	7.6	3	29	41	79	8	140°			
NCD3-GP 0770-079/041-S08	●	7.7	3	29	41	79	8	140°			

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

- A - TURNING
- B - THREADING
- C - GROOVING
- D - MILLING
- E - DRILLING
- F - ACCESSORIES
- G - SPARE PARTS

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Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG			
NCD3-GP 0780-079/041-S08	●	7.8	3	29	41	79	8	140°			
NCD3-GP 0790-079/041-S08	●	7.9	3	29	41	79	8	140°			
NCD3-GP 0800-079/041-S08	●	8	3	29	41	79	8	140°			
NCD3-GP 0810-089/047-S10	●	8.1	3	35	47	89	10	140°			
NCD3-GP 0820-089/047-S10	●	8.2	3	35	47	89	10	140°			
NCD3-GP 0830-089/047-S10	●	8.3	3	35	47	89	10	140°			
NCD3-GP 0840-089/047-S10	●	8.4	3	35	47	89	10	140°			
NCD3-GP 0850-089/047-S10	●	8.5	3	35	47	89	10	140°			
NCD3-GP 0860-089/047-S10	●	8.6	3	35	47	89	10	140°			
NCD3-GP 0870-089/047-S10	●	8.7	3	35	47	89	10	140°			
NCD3-GP 0880-089/047-S10	●	8.8	3	35	47	89	10	140°			
NCD3-GP 0890-089/047-S10	●	8.9	3	35	47	89	10	140°			
NCD3-GP 0900-089/047-S10	●	9	3	35	47	89	10	140°			
NCD3-GP 0910-089/047-S10	●	9.1	3	35	47	89	10	140°			
NCD3-GP 0920-089/047-S10	●	9.2	3	35	47	89	10	140°			
NCD3-GP 0930-089/047-S10	●	9.3	3	35	47	89	10	140°			
NCD3-GP 0940-089/047-S10	●	9.4	3	35	47	89	10	140°			
NCD3-GP 0950-089/047-S10	●	9.5	3	35	47	89	10	140°			
NCD3-GP 0960-089/047-S10	●	9.6	3	35	47	89	10	140°			
NCD3-GP 0970-089/047-S10	●	9.7	3	35	47	89	10	140°			
NCD3-GP 0980-089/047-S10	●	9.8	3	35	47	89	10	140°			
NCD3-GP 0990-089/047-S10	●	9.9	3	35	47	89	10	140°			
NCD3-GP 1000-089/047-S10	●	10	3	35	47	89	10	140°			
NCD3-GP 1010-102/055-S12	●	10.1	3	40	55	102	12	140°			
NCD3-GP 1020-102/055-S12	●	10.2	3	40	55	102	12	140°			
NCD3-GP 1030-102/055-S12	●	10.3	3	40	55	102	12	140°			
NCD3-GP 1040-102/055-S12	●	10.4	3	40	55	102	12	140°			
NCD3-GP 1050-102/055-S12	●	10.5	3	40	55	102	12	140°			
NCD3-GP 1060-102/055-S12	●	10.6	3	40	55	102	12	140°			
NCD3-GP 1070-102/055-S12	●	10.7	3	40	55	102	12	140°			
NCD3-GP 1080-102/055-S12	●	10.8	3	40	55	102	12	140°			
NCD3-GP 1090-102/055-S12	●	10.9	3	40	55	102	12	140°			
NCD3-GP 1100-102/055-S12	●	11	3	40	55	102	12	140°			
NCD3-GP 1110-102/055-S12	●	11.1	3	40	55	102	12	140°			
NCD3-GP 1120-102/055-S12	●	11.2	3	40	55	102	12	140°			
NCD3-GP 1130-102/055-S12	●	11.3	3	40	55	102	12	140°			
NCD3-GP 1140-102/055-S12	●	11.4	3	40	55	102	12	140°			
NCD3-GP 1150-102/055-S12	●	11.5	3	40	55	102	12	140°			
NCD3-GP 1160-102/055-S12	●	11.6	3	40	55	102	12	140°			
NCD3-GP 1170-102/055-S12	●	11.7	3	40	55	102	12	140°			
NCD3-GP 1180-102/055-S12	●	11.8	3	40	55	102	12	140°			
NCD3-GP 1190-102/055-S12	●	11.9	3	40	55	102	12	140°			
NCD3-GP 1200-102/055-S12	●	12	3	40	55	102	12	140°			
NCD3-GP 1250-107/060-S14	●	12.5	3	43	60	107	14	140°			
NCD3-GP 1300-107/060-S14	●	13	3	43	60	107	14	140°			
NCD3-GP 1350-107/060-S14	●	13.5	3	43	60	107	14	140°			
NCD3-GP 1400-107/060-S14	●	14	3	43	60	107	14	140°			
NCD3-GP 1450-115/065-S16	●	14.5	3	45	65	115	16	140°			
NCD3-GP 1500-115/065-S16	●	15	3	49	65	115	16	140°			
NCD3-GP 1550-115/065-S16	●	15.5	3	49	65	115	16	140°			
NCD3-GP 1600-115/065-S16	●	16	3	49	65	115	16	140°			
NCD3-GP 1650-123/073-S18	●	16.5	3	52	73	123	18	140°			
NCD3-GP 1700-123/073-S18	●	17	3	52	73	123	18	140°			
NCD3-GP 1750-123/073-S18	●	17.5	3	52	73	123	18	140°			
NCD3-GP 1800-123/073-S18	●	18	3	52	73	123	18	140°			
NCD3-GP 1850-131/079-S20	●	18.5	3	55	79	131	20	140°			
NCD3-GP 1900-131/079-S20	●	19	3	55	79	131	20	140°			
NCD3-GP 1950-131/079-S20	●	19.5	3	55	79	131	20	140°			
NCD3-GP 2000-131/079-S20	●	20	3	55	79	131	20	140°			

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

NCD5-GP

NCD

- First choice for steel and cast iron machining (<45 HRC)
- **Without** coolant holes
- Self centering geometry for accurate holes
- AlTiN-nano based coating for long lasting tool life

5xD

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG			
NCD5-GP 0300-066/028-S06	●	3	5	23	28	66	6	140°			
NCD5-GP 0310-066/028-S06	●	3.1	5	23	28	66	6	140°			
NCD5-GP 0320-066/028-S06	●	3.2	5	23	28	66	6	140°			
NCD5-GP 0330-066/028-S06	●	3.3	5	23	28	66	6	140°			
NCD5-GP 0340-066/028-S06	●	3.4	5	23	28	66	6	140°			
NCD5-GP 0350-066/028-S06	●	3.5	5	23	28	66	6	140°			
NCD5-GP 0360-066/028-S06	●	3.6	5	23	28	66	6	140°			
NCD5-GP 0370-066/028-S06	●	3.7	5	23	28	66	6	140°			
NCD5-GP 0380-074/036-S06	●	3.8	5	29	36	74	6	140°			
NCD5-GP 0390-074/036-S06	●	3.9	5	29	36	74	6	140°			
NCD5-GP 0400-074/036-S06	●	4	5	29	36	74	6	140°			
NCD5-GP 0410-074/036-S06	●	4.1	5	29	36	74	6	140°			
NCD5-GP 0420-074/036-S06	●	4.2	5	29	36	74	6	140°			
NCD5-GP 0430-074/036-S06	●	4.3	5	29	36	74	6	140°			
NCD5-GP 0440-074/036-S06	●	4.4	5	29	36	74	6	140°			
NCD5-GP 0450-074/036-S06	●	4.5	5	29	36	74	6	140°			
NCD5-GP 0460-074/036-S06	●	4.6	5	29	36	74	6	140°			
NCD5-GP 0470-074/036-S06	●	4.7	5	29	36	74	6	140°			
NCD5-GP 0480-082/044-S06	●	4.8	5	35	44	82	6	140°			
NCD5-GP 0490-082/044-S06	●	4.9	5	35	44	82	6	140°			
NCD5-GP 0500-082/044-S06	●	5	5	35	44	82	6	140°			
NCD5-GP 0510-082/044-S06	●	5.1	5	35	44	82	6	140°			
NCD5-GP 0520-082/044-S06	●	5.2	5	35	44	82	6	140°			
NCD5-GP 0530-082/044-S06	●	5.3	5	35	44	82	6	140°			
NCD5-GP 0540-082/044-S06	●	5.4	5	35	44	82	6	140°			
NCD5-GP 0550-082/044-S06	●	5.5	5	35	44	82	6	140°			
NCD5-GP 0560-082/044-S06	●	5.6	5	35	44	82	6	140°			
NCD5-GP 0570-082/044-S06	●	5.7	5	35	44	82	6	140°			
NCD5-GP 0580-082/044-S06	●	5.8	5	35	44	82	6	140°			
NCD5-GP 0590-082/044-S06	●	5.9	5	35	44	82	6	140°			
NCD5-GP 0600-082/044-S06	●	6	5	35	44	82	6	140°			
NCD5-GP 0610-091/053-S08	●	6.1	5	43	53	91	8	140°			
NCD5-GP 0620-091/053-S08	●	6.2	5	43	53	91	8	140°			
NCD5-GP 0630-091/053-S08	●	6.3	5	43	53	91	8	140°			
NCD5-GP 0640-091/053-S08	●	6.4	5	43	53	91	8	140°			
NCD5-GP 0650-091/053-S08	●	6.5	5	43	53	91	8	140°			
NCD5-GP 0660-091/053-S08	●	6.6	5	43	53	91	8	140°			
NCD5-GP 0670-091/053-S08	●	6.7	5	43	53	91	8	140°			
NCD5-GP 0680-091/053-S08	●	6.8	5	43	53	91	8	140°			
NCD5-GP 0690-091/053-S08	●	6.9	5	43	53	91	8	140°			
NCD5-GP 0700-091/053-S08	●	7	5	43	53	91	8	140°			
NCD5-GP 0710-091/053-S08	●	7.1	5	43	53	91	8	140°			
NCD5-GP 0720-091/053-S08	●	7.2	5	43	53	91	8	140°			
NCD5-GP 0730-091/053-S08	●	7.3	5	43	53	91	8	140°			
NCD5-GP 0740-091/053-S08	●	7.4	5	43	53	91	8	140°			
NCD5-GP 0750-091/053-S08	●	7.5	5	43	53	91	8	140°			
NCD5-GP 0760-091/053-S08	●	7.6	5	43	53	91	8	140°			
NCD5-GP 0770-091/053-S08	●	7.7	5	43	53	91	8	140°			

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Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG			
NCD5-GP 0780-091/053-S08	●	7.8	5	43	53	91	8	140°			
NCD5-GP 0790-091/053-S08	●	7.9	5	43	53	91	8	140°			
NCD5-GP 0800-091/053-S08	●	8	5	43	53	91	8	140°			
NCD5-GP 0810-103/061-S10	●	8.1	5	48.85	61	103	10	140°			
NCD5-GP 0820-103/061-S10	●	8.2	5	48.7	61	103	10	140°			
NCD5-GP 0830-103/061-S10	●	8.3	5	48.55	61	103	10	140°			
NCD5-GP 0840-103/061-S10	●	8.4	5	49	61	103	10	140°			
NCD5-GP 0850-103/061-S10	●	8.5	5	49	61	103	10	140°			
NCD5-GP 0860-103/061-S10	●	8.6	5	49	61	103	10	140°			
NCD5-GP 0870-103/061-S10	●	8.7	5	49	61	103	10	140°			
NCD5-GP 0880-103/061-S10	●	8.8	5	49	61	103	10	140°			
NCD5-GP 0890-103/061-S10	●	8.9	5	49	61	103	10	140°			
NCD5-GP 0900-103/061-S10	●	9	5	49	61	103	10	140°			
NCD5-GP 0910-103/061-S10	●	9.1	5	49	61	103	10	140°			
NCD5-GP 0920-103/061-S10	●	9.2	5	49	61	103	10	140°			
NCD5-GP 0930-103/061-S10	●	9.3	5	49	61	103	10	140°			
NCD5-GP 0940-103/061-S10	●	9.4	5	49	61	103	10	140°			
NCD5-GP 0950-103/061-S10	●	9.5	5	49	61	103	10	140°			
NCD5-GP 0960-103/061-S10	●	9.6	5	49	61	103	10	140°			
NCD5-GP 0970-103/061-S10	●	9.7	5	49	61	103	10	140°			
NCD5-GP 0980-103/061-S10	●	9.8	5	49	61	103	10	140°			
NCD5-GP 0990-103/061-S10	●	9.9	5	49	61	103	10	140°			
NCD5-GP 1000-103/061-S10	●	10	5	49	61	103	10	140°			
NCD5-GP 1010-118/071-S12	●	10.1	5	52	71	118	12	140°			
NCD5-GP 1020-118/071-S12	●	10.2	5	52	71	118	12	140°			
NCD5-GP 1030-118/071-S12	●	10.3	5	52	71	118	12	140°			
NCD5-GP 1040-118/071-S12	●	10.4	5	52	71	118	12	140°			
NCD5-GP 1050-118/071-S12	●	10.5	5	52	71	118	12	140°			
NCD5-GP 1060-118/071-S12	●	10.6	5	52	71	118	12	140°			
NCD5-GP 1070-118/071-S12	●	10.7	5	52	71	118	12	140°			
NCD5-GP 1080-118/071-S12	●	10.8	5	52	71	118	12	140°			
NCD5-GP 1090-118/071-S12	●	10.9	5	52	71	118	12	140°			
NCD5-GP 1100-118/071-S12	●	11	5	52	71	118	12	140°			
NCD5-GP 1110-118/071-S12	●	11.1	5	52	71	118	12	140°			
NCD5-GP 1120-118/071-S12	●	11.2	5	52	71	118	12	140°			
NCD5-GP 1130-118/071-S12	●	11.3	5	52	71	118	12	140°			
NCD5-GP 1140-118/071-S12	●	11.4	5	52	71	118	12	140°			
NCD5-GP 1150-118/071-S12	●	11.5	5	52	71	118	12	140°			
NCD5-GP 1160-118/071-S12	●	11.6	5	52	71	118	12	140°			
NCD5-GP 1170-118/071-S12	●	11.7	5	52	71	118	12	140°			
NCD5-GP 1180-118/071-S12	●	11.8	5	52	71	118	12	140°			
NCD5-GP 1190-118/071-S12	●	11.9	5	52	71	118	12	140°			
NCD5-GP 1200-118/071-S12	●	12	5	52	71	118	12	140°			
NCD5-GP 1250-124/077-S14	●	12.5	5	63	77	124	14	140°			
NCD5-GP 1300-124/077-S14	●	13	5	63	77	124	14	140°			
NCD5-GP 1350-124/077-S14	●	13.5	5	63	77	124	14	140°			
NCD5-GP 1400-124/077-S14	●	14	5	63	77	124	14	140°			
NCD5-GP 1450-133/083-S16	●	14.5	5	67	83	133	16	140°			
NCD5-GP 1500-133/083-S16	●	15	5	67	83	133	16	140°			
NCD5-GP 1550-133/083-S16	●	15.5	5	67	83	133	16	140°			
NCD5-GP 1600-133/083-S16	●	16	5	67	83	133	16	140°			
NCD5-GP 1650-143/093-S18	●	16.5	5	75	93	143	18	140°			
NCD5-GP 1700-143/093-S18	●	17	5	75	93	143	18	140°			
NCD5-GP 1750-143/093-S18	●	17.5	5	75	93	143	18	140°			
NCD5-GP 1800-143/093-S18	●	18	5	75	93	143	18	140°			
NCD5-GP 1850-153/101-S20	●	18.5	5	81	101	153	20	140°			
NCD5-GP 1900-153/101-S20	●	19	5	81	101	153	20	140°			
NCD5-GP 1950-153/101-S20	●	19.5	5	81	101	153	20	140°			
NCD5-GP 2000-153/101-S20	●	20	5	81	101	153	20	140°			

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

NCD3H-GP

NCD

- First choice for steel and cast iron machining (<45 HRC)
- With coolant holes
- Self centering geometry for accurate holes
- AlTiN-nano based coating for long lasting tool life

3xD
with coolant holes

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG			
NCD3H-GP 0300-062/020-S06	●	3	3	14	20	62	6	140°			
NCD3H-GP 0310-062/020-S06	●	3.1	3	14	20	62	6	140°			
NCD3H-GP 0320-062/020-S06	●	3.2	3	14	20	62	6	140°			
NCD3H-GP 0330-062/020-S06	●	3.3	3	14	20	62	6	140°			
NCD3H-GP 0340-062/020-S06	●	3.4	3	14	20	62	6	140°			
NCD3H-GP 0350-062/020-S06	●	3.5	3	14	20	62	6	140°			
NCD3H-GP 0360-062/020-S06	●	3.6	3	14	20	62	6	140°			
NCD3H-GP 0370-062/020-S06	●	3.7	3	14	20	62	6	140°			
NCD3H-GP 0380-066/024-S06	●	3.8	3	17	24	66	6	140°			
NCD3H-GP 0390-066/024-S06	●	3.9	3	17	24	66	6	140°			
NCD3H-GP 0400-066/024-S06	●	4	3	17	24	66	6	140°			
NCD3H-GP 0410-066/024-S06	●	4.1	3	17	24	66	6	140°			
NCD3H-GP 0420-066/024-S06	●	4.2	3	17	24	66	6	140°			
NCD3H-GP 0430-066/024-S06	●	4.3	3	17	24	66	6	140°			
NCD3H-GP 0440-066/024-S06	●	4.4	3	17	24	66	6	140°			
NCD3H-GP 0450-066/024-S06	●	4.5	3	17	24	66	6	140°			
NCD3H-GP 0460-066/024-S06	●	4.6	3	17	24	66	6	140°			
NCD3H-GP 0470-066/024-S06	●	4.7	3	17	24	66	6	140°			
NCD3H-GP 0480-066/028-S06	●	4.8	3	20	28	66	6	140°			
NCD3H-GP 0490-066/028-S06	●	4.9	3	20	28	66	6	140°			
NCD3H-GP 0500-066/028-S06	●	5	3	20	28	66	6	140°			
NCD3H-GP 0510-066/028-S06	●	5.1	3	20	28	66	6	140°			
NCD3H-GP 0520-066/028-S06	●	5.2	3	20	28	66	6	140°			
NCD3H-GP 0530-066/028-S06	●	5.3	3	20	28	66	6	140°			
NCD3H-GP 0540-066/028-S06	●	5.4	3	20	28	66	6	140°			
NCD3H-GP 0550-066/028-S06	●	5.5	3	20	28	66	6	140°			
NCD3H-GP 0560-066/028-S06	●	5.6	3	20	28	66	6	140°			
NCD3H-GP 0570-066/028-S06	●	5.7	3	20	28	66	6	140°			
NCD3H-GP 0580-066/028-S06	●	5.8	3	20	28	66	6	140°			
NCD3H-GP 0590-066/028-S06	●	5.9	3	20	28	66	6	140°			
NCD3H-GP 0600-066/028-S06	●	6	3	20	28	66	6	140°			
NCD3H-GP 0610-079/034-S08	●	6.1	3	24	34	79	8	140°			
NCD3H-GP 0620-079/034-S08	●	6.2	3	24	34	79	8	140°			
NCD3H-GP 0630-079/034-S08	●	6.3	3	24	34	79	8	140°			
NCD3H-GP 0640-079/034-S08	●	6.4	3	24	34	79	8	140°			
NCD3H-GP 0650-079/034-S08	●	6.5	3	24	34	79	8	140°			
NCD3H-GP 0660-079/034-S08	●	6.6	3	24	34	79	8	140°			
NCD3H-GP 0670-079/034-S08	●	6.7	3	24	34	79	8	140°			
NCD3H-GP 0680-079/034-S08	●	6.8	3	24	34	79	8	140°			
NCD3H-GP 0690-079/034-S08	●	6.9	3	24	34	79	8	140°			
NCD3H-GP 0700-079/034-S08	●	7	3	24	34	79	8	140°			
NCD3H-GP 0710-079/041-S08	●	7.1	3	29	41	79	8	140°			
NCD3H-GP 0720-079/041-S08	●	7.2	3	29	41	79	8	140°			
NCD3H-GP 0730-079/041-S08	●	7.3	3	29	41	79	8	140°			
NCD3H-GP 0740-079/041-S08	●	7.4	3	29	41	79	8	140°			
NCD3H-GP 0750-079/041-S08	●	7.5	3	29	41	79	8	140°			
NCD3H-GP 0760-079/041-S08	●	7.6	3	29	41	79	8	140°			
NCD3H-GP 0770-079/041-S08	●	7.7	3	29	41	79	8	140°			

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

- A - TURNING
- B - THREADING
- C - GROOVING
- D - MILLING
- E - DRILLING
- F - ACCESSORIES
- G - SPARE PARTS

A - TURNING
B - THREADING
C - GROOVING
D - MILLING
E - DRILLING
F - ACCESSORIES
G - SPARE PARTS

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG			
NCD3H-GP 0780-079/041-S08	●	7.8	3	29	41	79	8	140°			
NCD3H-GP 0790-079/041-S08	●	7.9	3	29	41	79	8	140°			
NCD3H-GP 0800-079/041-S08	●	8	3	29	41	79	8	140°			
NCD3H-GP 0810-089/047-S10	●	8.1	3	35	47	89	10	140°			
NCD3H-GP 0820-089/047-S10	●	8.2	3	35	47	89	10	140°			
NCD3H-GP 0830-089/047-S10	●	8.3	3	35	47	89	10	140°			
NCD3H-GP 0840-089/047-S10	●	8.4	3	35	47	89	10	140°			
NCD3H-GP 0850-089/047-S10	●	8.5	3	35	47	89	10	140°			
NCD3H-GP 0860-089/047-S10	●	8.6	3	35	47	89	10	140°			
NCD3H-GP 0870-089/047-S10	●	8.7	3	35	47	89	10	140°			
NCD3H-GP 0880-089/047-S10	●	8.8	3	35	47	89	10	140°			
NCD3H-GP 0890-089/047-S10	●	8.9	3	35	47	89	10	140°			
NCD3H-GP 0900-089/047-S10	●	9	3	35	47	89	10	140°			
NCD3H-GP 0910-089/047-S10	●	9.1	3	35	47	89	10	140°			
NCD3H-GP 0920-089/047-S10	●	9.2	3	35	47	89	10	140°			
NCD3H-GP 0930-089/047-S10	●	9.3	3	35	47	89	10	140°			
NCD3H-GP 0940-089/047-S10	●	9.4	3	35	47	89	10	140°			
NCD3H-GP 0950-089/047-S10	●	9.5	3	35	47	89	10	140°			
NCD3H-GP 0960-089/047-S10	●	9.6	3	35	47	89	10	140°			
NCD3H-GP 0970-089/047-S10	●	9.7	3	35	47	89	10	140°			
NCD3H-GP 0980-089/047-S10	●	9.8	3	35	47	89	10	140°			
NCD3H-GP 0990-089/047-S10	●	9.9	3	35	47	89	10	140°			
NCD3H-GP 1000-089/047-S10	●	10	3	35	47	89	10	140°			
NCD3H-GP 1010-102/055-S12	●	10.1	3	40	55	102	12	140°			
NCD3H-GP 1020-102/055-S12	●	10.2	3	40	55	102	12	140°			
NCD3H-GP 1030-102/055-S12	●	10.3	3	40	55	102	12	140°			
NCD3H-GP 1040-102/055-S12	●	10.4	3	40	55	102	12	140°			
NCD3H-GP 1050-102/055-S12	●	10.5	3	40	55	102	12	140°			
NCD3H-GP 1060-102/055-S12	●	10.6	3	40	55	102	12	140°			
NCD3H-GP 1070-102/055-S12	●	10.7	3	40	55	102	12	140°			
NCD3H-GP 1080-102/055-S12	●	10.8	3	40	55	102	12	140°			
NCD3H-GP 1090-102/055-S12	●	10.9	3	40	55	102	12	140°			
NCD3H-GP 1100-102/055-S12	●	11	3	40	55	102	12	140°			
NCD3H-GP 1110-102/055-S12	●	11.1	3	40	55	102	12	140°			
NCD3H-GP 1120-102/055-S12	●	11.2	3	40	55	102	12	140°			
NCD3H-GP 1130-102/055-S12	●	11.3	3	40	55	102	12	140°			
NCD3H-GP 1140-102/055-S12	●	11.4	3	40	55	102	12	140°			
NCD3H-GP 1150-102/055-S12	●	11.5	3	40	55	102	12	140°			
NCD3H-GP 1160-102/055-S12	●	11.6	3	40	55	102	12	140°			
NCD3H-GP 1170-102/055-S12	●	11.7	3	40	55	102	12	140°			
NCD3H-GP 1180-102/055-S12	●	11.8	3	40	55	102	12	140°			
NCD3H-GP 1190-102/055-S12	●	11.9	3	40	55	102	12	140°			
NCD3H-GP 1200-102/055-S12	●	12	3	40	55	102	12	140°			
NCD3H-GP 1250-107/060-S14	●	12.5	3	43	60	107	14	140°			
NCD3H-GP 1300-107/060-S14	●	13	3	43	60	107	14	140°			
NCD3H-GP 1350-107/060-S14	●	13.5	3	43	60	107	14	140°			
NCD3H-GP 1400-107/060-S14	●	14	3	43	60	107	14	140°			
NCD3H-GP 1450-115/065-S16	●	14.5	3	45	65	115	16	140°			
NCD3H-GP 1500-115/065-S16	●	15	3	49	65	115	16	140°			
NCD3H-GP 1550-115/065-S16	●	15.5	3	49	65	115	16	140°			
NCD3H-GP 1600-115/065-S16	●	16	3	49	65	115	16	140°			
NCD3H-GP 1650-123/073-S18	●	16.5	3	52	73	123	18	140°			
NCD3H-GP 1700-123/073-S18	●	17	3	52	73	123	18	140°			
NCD3H-GP 1750-123/073-S18	●	17.5	3	52	73	123	18	140°			
NCD3H-GP 1800-123/073-S18	●	18	3	52	73	123	18	140°			
NCD3H-GP 1850-131/079-S20	●	18.5	3	55	79	131	20	140°			
NCD3H-GP 1900-131/079-S20	●	19	3	55	79	131	20	140°			
NCD3H-GP 1950-131/079-S20	●	19.5	3	55	79	131	20	140°			
NCD3H-GP 2000-131/079-S20	●	20	3	55	79	131	20	140°			

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

NCD5H-GP

NCD

- First choice for steel and cast iron machining (<45 HRC)
- With coolant holes
- Self centering geometry for accurate holes
- AlTiN-nano based coating for long lasting tool life

5xD
with coolant holes

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG			
NCD5H-GP 0300-066/028-S06	●	3	5	23	28	66	6	140°			
NCD5H-GP 0310-066/028-S06	●	3.1	5	23	28	66	6	140°			
NCD5H-GP 0320-066/028-S06	●	3.2	5	23	28	66	6	140°			
NCD5H-GP 0330-066/028-S06	●	3.3	5	23	28	66	6	140°			
NCD5H-GP 0340-066/028-S06	●	3.4	5	23	28	66	6	140°			
NCD5H-GP 0350-066/028-S06	●	3.5	5	23	28	66	6	140°			
NCD5H-GP 0360-066/028-S06	●	3.6	5	23	28	66	6	140°			
NCD5H-GP 0370-066/028-S06	●	3.7	5	23	28	66	6	140°			
NCD5H-GP 0380-074/036-S06	●	3.8	5	29	36	74	6	140°			
NCD5H-GP 0390-074/036-S06	●	3.9	5	29	36	74	6	140°			
NCD5H-GP 0400-074/036-S06	●	4	5	29	36	74	6	140°			
NCD5H-GP 0410-074/036-S06	●	4.1	5	29	36	74	6	140°			
NCD5H-GP 0420-074/036-S06	●	4.2	5	29	36	74	6	140°			
NCD5H-GP 0430-074/036-S06	●	4.3	5	29	36	74	6	140°			
NCD5H-GP 0440-074/036-S06	●	4.4	5	29	36	74	6	140°			
NCD5H-GP 0450-074/036-S06	●	4.5	5	29	36	74	6	140°			
NCD5H-GP 0460-074/036-S06	●	4.6	5	29	36	74	6	140°			
NCD5H-GP 0470-074/036-S06	●	4.7	5	29	36	74	6	140°			
NCD5H-GP 0480-082/044-S06	●	4.8	5	35	44	82	6	140°			
NCD5H-GP 0490-082/044-S06	●	4.9	5	35	44	82	6	140°			
NCD5H-GP 0500-082/044-S06	●	5	5	35	44	82	6	140°			
NCD5H-GP 0510-082/044-S06	●	5.1	5	35	44	82	6	140°			
NCD5H-GP 0520-082/044-S06	●	5.2	5	35	44	82	6	140°			
NCD5H-GP 0530-082/044-S06	●	5.3	5	35	44	82	6	140°			
NCD5H-GP 0540-082/044-S06	●	5.4	5	35	44	82	6	140°			
NCD5H-GP 0550-082/044-S06	●	5.5	5	35	44	82	6	140°			
NCD5H-GP 0560-082/044-S06	●	5.6	5	35	44	82	6	140°			
NCD5H-GP 0570-082/044-S06	●	5.7	5	35	44	82	6	140°			
NCD5H-GP 0580-082/044-S06	●	5.8	5	35	44	82	6	140°			
NCD5H-GP 0590-082/044-S06	●	5.9	5	35	44	82	6	140°			
NCD5H-GP 0600-082/044-S06	●	6	5	35	44	82	6	140°			
NCD5H-GP 0610-091/053-S08	●	6.1	5	43	53	91	8	140°			
NCD5H-GP 0620-091/053-S08	●	6.2	5	43	53	91	8	140°			
NCD5H-GP 0630-091/053-S08	●	6.3	5	43	53	91	8	140°			
NCD5H-GP 0640-091/053-S08	●	6.4	5	43	53	91	8	140°			
NCD5H-GP 0650-091/053-S08	●	6.5	5	43	53	91	8	140°			
NCD5H-GP 0660-091/053-S08	●	6.6	5	43	53	91	8	140°			
NCD5H-GP 0670-091/053-S08	●	6.7	5	43	53	91	8	140°			
NCD5H-GP 0680-091/053-S08	●	6.8	5	43	53	91	8	140°			
NCD5H-GP 0690-091/053-S08	●	6.9	5	43	53	91	8	140°			
NCD5H-GP 0700-091/053-S08	●	7	5	43	53	91	8	140°			
NCD5H-GP 0710-091/053-S08	●	7.1	5	43	53	91	8	140°			
NCD5H-GP 0720-091/053-S08	●	7.2	5	43	53	91	8	140°			
NCD5H-GP 0730-091/053-S08	●	7.3	5	43	53	91	8	140°			
NCD5H-GP 0740-091/053-S08	●	7.4	5	43	53	91	8	140°			
NCD5H-GP 0750-091/053-S08	●	7.5	5	43	53	91	8	140°			
NCD5H-GP 0760-091/053-S08	●	7.6	5	43	53	91	8	140°			
NCD5H-GP 0770-091/053-S08	●	7.7	5	43	53	91	8	140°			

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

- A - TURNING
- B - THREADING
- C - GROOVING
- D - MILLING
- E - DRILLING
- F - ACCESSORIES
- G - SPARE PARTS

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG			
NCD5H-GP 0780-091/053-S08	●	7.8	5	43	53	91	8	140°			
NCD5H-GP 0790-091/053-S08	●	7.9	5	43	53	91	8	140°			
NCD5H-GP 0800-091/053-S08	●	8	5	43	53	91	8	140°			
NCD5H-GP 0810-103/061-S10	●	8.1	5	48.85	61	103	10	140°			
NCD5H-GP 0820-103/061-S10	●	8.2	5	48.7	61	103	10	140°			
NCD5H-GP 0830-103/061-S10	●	8.3	5	48.55	61	103	10	140°			
NCD5H-GP 0840-103/061-S10	●	8.4	5	49	61	103	10	140°			
NCD5H-GP 0850-103/061-S10	●	8.5	5	49	61	103	10	140°			
NCD5H-GP 0860-103/061-S10	●	8.6	5	49	61	103	10	140°			
NCD5H-GP 0870-103/061-S10	●	8.7	5	49	61	103	10	140°			
NCD5H-GP 0880-103/061-S10	●	8.8	5	49	61	103	10	140°			
NCD5H-GP 0890-103/061-S10	●	8.9	5	49	61	103	10	140°			
NCD5H-GP 0900-103/061-S10	●	9	5	49	61	103	10	140°			
NCD5H-GP 0910-103/061-S10	●	9.1	5	49	61	103	10	140°			
NCD5H-GP 0920-103/061-S10	●	9.2	5	49	61	103	10	140°			
NCD5H-GP 0930-103/061-S10	●	9.3	5	49	61	103	10	140°			
NCD5H-GP 0940-103/061-S10	●	9.4	5	49	61	103	10	140°			
NCD5H-GP 0950-103/061-S10	●	9.5	5	49	61	103	10	140°			
NCD5H-GP 0960-103/061-S10	●	9.6	5	49	61	103	10	140°			
NCD5H-GP 0970-103/061-S10	●	9.7	5	49	61	103	10	140°			
NCD5H-GP 0980-103/061-S10	●	9.8	5	49	61	103	10	140°			
NCD5H-GP 0990-103/061-S10	●	9.9	5	49	61	103	10	140°			
NCD5H-GP 1000-103/061-S10	●	10	5	49	61	103	10	140°			
NCD5H-GP 1010-118/071-S12	●	10.1	5	52	71	118	12	140°			
NCD5H-GP 1020-118/071-S12	●	10.2	5	52	71	118	12	140°			
NCD5H-GP 1030-118/071-S12	●	10.3	5	52	71	118	12	140°			
NCD5H-GP 1040-118/071-S12	●	10.4	5	52	71	118	12	140°			
NCD5H-GP 1050-118/071-S12	●	10.5	5	52	71	118	12	140°			
NCD5H-GP 1060-118/071-S12	●	10.6	5	52	71	118	12	140°			
NCD5H-GP 1070-118/071-S12	●	10.7	5	52	71	118	12	140°			
NCD5H-GP 1080-118/071-S12	●	10.8	5	52	71	118	12	140°			
NCD5H-GP 1090-118/071-S12	●	10.9	5	52	71	118	12	140°			
NCD5H-GP 1100-118/071-S12	●	11	5	52	71	118	12	140°			
NCD5H-GP 1110-118/071-S12	●	11.1	5	52	71	118	12	140°			
NCD5H-GP 1120-118/071-S12	●	11.2	5	52	71	118	12	140°			
NCD5H-GP 1130-118/071-S12	●	11.3	5	52	71	118	12	140°			
NCD5H-GP 1140-118/071-S12	●	11.4	5	52	71	118	12	140°			
NCD5H-GP 1150-118/071-S12	●	11.5	5	52	71	118	12	140°			
NCD5H-GP 1160-118/071-S12	●	11.6	5	52	71	118	12	140°			
NCD5H-GP 1170-118/071-S12	●	11.7	5	52	71	118	12	140°			
NCD5H-GP 1180-118/071-S12	●	11.8	5	52	71	118	12	140°			
NCD5H-GP 1190-118/071-S12	●	11.9	5	52	71	118	12	140°			
NCD5H-GP 1200-118/071-S12	●	12	5	52	71	118	12	140°			
NCD5H-GP 1250-124/077-S14	●	12.5	5	63	77	124	14	140°			
NCD5H-GP 1300-124/077-S14	●	13	5	63	77	124	14	140°			
NCD5H-GP 1350-124/077-S14	●	13.5	5	63	77	124	14	140°			
NCD5H-GP 1400-124/077-S14	●	14	5	63	77	124	14	140°			
NCD5H-GP 1450-133/083-S16	●	14.5	5	67	83	133	16	140°			
NCD5H-GP 1500-133/083-S16	●	15	5	67	83	133	16	140°			
NCD5H-GP 1550-133/083-S16	●	15.5	5	67	83	133	16	140°			
NCD5H-GP 1600-133/083-S16	●	16	5	67	83	133	16	140°			
NCD5H-GP 1650-143/093-S18	●	16.5	5	75	93	143	18	140°			
NCD5H-GP 1700-143/093-S18	●	17	5	75	93	143	18	140°			
NCD5H-GP 1750-143/093-S18	●	17.5	5	75	93	143	18	140°			
NCD5H-GP 1800-143/093-S18	●	18	5	75	93	143	18	140°			
NCD5H-GP 1850-153/101-S20	●	18.5	5	81	101	153	20	140°			
NCD5H-GP 1900-153/101-S20	●	19	5	81	101	153	20	140°			
NCD5H-GP 1950-153/101-S20	●	19.5	5	81	101	153	20	140°			
NCD5H-GP 2000-153/101-S20	●	20	5	81	101	153	20	140°			

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

NCD3H-SC

NCD

- First choice for stainless steel and sticky free-cutting steels
- With coolant holes
- Self centering geometry for accurate holes
- AlCrN based multilayer coating with very low friction coefficient to reduce built up edge

3xD
with coolant holes

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG			
NCD3H-SC 0300-062/020-S06	●	3	3	14	20	62	6	140°			
NCD3H-SC 0310-062/020-S06	●	3.1	3	14	20	62	6	140°			
NCD3H-SC 0320-062/020-S06	●	3.2	3	14	20	62	6	140°			
NCD3H-SC 0330-062/020-S06	●	3.3	3	14	20	62	6	140°			
NCD3H-SC 0340-062/020-S06	●	3.4	3	14	20	62	6	140°			
NCD3H-SC 0350-062/020-S06	●	3.5	3	14	20	62	6	140°			
NCD3H-SC 0360-062/020-S06	●	3.6	3	14	20	62	6	140°			
NCD3H-SC 0370-062/020-S06	●	3.7	3	14	20	62	6	140°			
NCD3H-SC 0380-066/024-S06	●	3.8	3	17	24	66	6	140°			
NCD3H-SC 0390-066/024-S06	●	3.9	3	17	24	66	6	140°			
NCD3H-SC 0400-066/024-S06	●	4	3	17	24	66	6	140°			
NCD3H-SC 0410-066/024-S06	●	4.1	3	17	24	66	6	140°			
NCD3H-SC 0420-066/024-S06	●	4.2	3	17	24	66	6	140°			
NCD3H-SC 0430-066/024-S06	●	4.3	3	17	24	66	6	140°			
NCD3H-SC 0440-066/024-S06	●	4.4	3	17	24	66	6	140°			
NCD3H-SC 0450-066/024-S06	●	4.5	3	17	24	66	6	140°			
NCD3H-SC 0460-066/024-S06	●	4.6	3	17	24	66	6	140°			
NCD3H-SC 0470-066/024-S06	●	4.7	3	17	24	66	6	140°			
NCD3H-SC 0480-066/028-S06	●	4.8	3	20	28	66	6	140°			
NCD3H-SC 0490-066/028-S06	●	4.9	3	20	28	66	6	140°			
NCD3H-SC 0500-066/028-S06	●	5	3	20	28	66	6	140°			
NCD3H-SC 0510-066/028-S06	●	5.1	3	20	28	66	6	140°			
NCD3H-SC 0520-066/028-S06	●	5.2	3	20	28	66	6	140°			
NCD3H-SC 0530-066/028-S06	●	5.3	3	20	28	66	6	140°			
NCD3H-SC 0540-066/028-S06	●	5.4	3	20	28	66	6	140°			
NCD3H-SC 0550-066/028-S06	●	5.5	3	20	28	66	6	140°			
NCD3H-SC 0560-066/028-S06	●	5.6	3	20	28	66	6	140°			
NCD3H-SC 0570-066/028-S06	●	5.7	3	20	28	66	6	140°			
NCD3H-SC 0580-066/028-S06	●	5.8	3	20	28	66	6	140°			
NCD3H-SC 0590-066/028-S06	●	5.9	3	20	28	66	6	140°			
NCD3H-SC 0600-066/028-S06	●	6	3	20	28	66	6	140°			
NCD3H-SC 0610-079/034-S08	●	6.1	3	24	34	79	8	140°			
NCD3H-SC 0620-079/034-S08	●	6.2	3	24	34	79	8	140°			
NCD3H-SC 0630-079/034-S08	●	6.3	3	24	34	79	8	140°			
NCD3H-SC 0640-079/034-S08	●	6.4	3	24	34	79	8	140°			
NCD3H-SC 0650-079/034-S08	●	6.5	3	24	34	79	8	140°			
NCD3H-SC 0660-079/034-S08	●	6.6	3	24	34	79	8	140°			
NCD3H-SC 0670-079/034-S08	●	6.7	3	24	34	79	8	140°			
NCD3H-SC 0680-079/034-S08	●	6.8	3	24	34	79	8	140°			
NCD3H-SC 0690-079/034-S08	●	6.9	3	24	34	79	8	140°			
NCD3H-SC 0700-079/034-S08	●	7	3	24	34	79	8	140°			
NCD3H-SC 0710-079/041-S08	●	7.1	3	29	41	79	8	140°			
NCD3H-SC 0720-079/041-S08	●	7.2	3	29	41	79	8	140°			
NCD3H-SC 0730-079/041-S08	●	7.3	3	29	41	79	8	140°			
NCD3H-SC 0740-079/041-S08	●	7.4	3	29	41	79	8	140°			
NCD3H-SC 0750-079/041-S08	●	7.5	3	29	41	79	8	140°			
NCD3H-SC 0760-079/041-S08	●	7.6	3	29	41	79	8	140°			
NCD3H-SC 0770-079/041-S08	●	7.7	3	29	41	79	8	140°			

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

- A - TURNING
- B - THREADING
- C - GROOVING
- D - MILLING
- E - DRILLING
- F - ACCESSORIES
- G - SPARE PARTS

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG			
NCD3H-SC 0780-079/041-S08	●	7.8	3	29	41	79	8	140°			
NCD3H-SC 0790-079/041-S08	●	7.9	3	29	41	79	8	140°			
NCD3H-SC 0800-079/041-S08	●	8	3	29	41	79	8	140°			
NCD3H-SC 0810-089/047-S10	●	8.1	3	35	47	89	10	140°			
NCD3H-SC 0820-089/047-S10	●	8.2	3	35	47	89	10	140°			
NCD3H-SC 0830-089/047-S10	●	8.3	3	35	47	89	10	140°			
NCD3H-SC 0840-089/047-S10	●	8.4	3	35	47	89	10	140°			
NCD3H-SC 0850-089/047-S10	●	8.5	3	35	47	89	10	140°			
NCD3H-SC 0860-089/047-S10	●	8.6	3	35	47	89	10	140°			
NCD3H-SC 0870-089/047-S10	●	8.7	3	35	47	89	10	140°			
NCD3H-SC 0880-089/047-S10	●	8.8	3	35	47	89	10	140°			
NCD3H-SC 0890-089/047-S10	●	8.9	3	35	47	89	10	140°			
NCD3H-SC 0900-089/047-S10	●	9	3	35	47	89	10	140°			
NCD3H-SC 0910-089/047-S10	●	9.1	3	35	47	89	10	140°			
NCD3H-SC 0920-089/047-S10	●	9.2	3	35	47	89	10	140°			
NCD3H-SC 0930-089/047-S10	●	9.3	3	35	47	89	10	140°			
NCD3H-SC 0940-089/047-S10	●	9.4	3	35	47	89	10	140°			
NCD3H-SC 0950-089/047-S10	●	9.5	3	35	47	89	10	140°			
NCD3H-SC 0960-089/047-S10	●	9.6	3	35	47	89	10	140°			
NCD3H-SC 0970-089/047-S10	●	9.7	3	35	47	89	10	140°			
NCD3H-SC 0980-089/047-S10	●	9.8	3	35	47	89	10	140°			
NCD3H-SC 0990-089/047-S10	●	9.9	3	35	47	89	10	140°			
NCD3H-SC 1000-089/047-S10	●	10	3	35	47	89	10	140°			
NCD3H-SC 1010-102/055-S12	●	10.1	3	40	55	102	12	140°			
NCD3H-SC 1020-102/055-S12	●	10.2	3	40	55	102	12	140°			
NCD3H-SC 1030-102/055-S12	●	10.3	3	40	55	102	12	140°			
NCD3H-SC 1040-102/055-S12	●	10.4	3	40	55	102	12	140°			
NCD3H-SC 1050-102/055-S12	●	10.5	3	40	55	102	12	140°			
NCD3H-SC 1060-102/055-S12	●	10.6	3	40	55	102	12	140°			
NCD3H-SC 1070-102/055-S12	●	10.7	3	40	55	102	12	140°			
NCD3H-SC 1080-102/055-S12	●	10.8	3	40	55	102	12	140°			
NCD3H-SC 1090-102/055-S12	●	10.9	3	40	55	102	12	140°			
NCD3H-SC 1100-102/055-S12	●	11	3	40	55	102	12	140°			
NCD3H-SC 1110-102/055-S12	●	11.1	3	40	55	102	12	140°			
NCD3H-SC 1120-102/055-S12	●	11.2	3	40	55	102	12	140°			
NCD3H-SC 1130-102/055-S12	●	11.3	3	40	55	102	12	140°			
NCD3H-SC 1140-102/055-S12	●	11.4	3	40	55	102	12	140°			
NCD3H-SC 1150-102/055-S12	●	11.5	3	40	55	102	12	140°			
NCD3H-SC 1160-102/055-S12	●	11.6	3	40	55	102	12	140°			
NCD3H-SC 1170-102/055-S12	●	11.7	3	40	55	102	12	140°			
NCD3H-SC 1180-102/055-S12	●	11.8	3	40	55	102	12	140°			
NCD3H-SC 1190-102/055-S12	●	11.9	3	40	55	102	12	140°			
NCD3H-SC 1200-102/055-S12	●	12	3	40	55	102	12	140°			
NCD3H-SC 1250-107/060-S14	●	12.5	3	43	60	107	14	140°			
NCD3H-SC 1300-107/060-S14	●	13	3	43	60	107	14	140°			
NCD3H-SC 1350-107/060-S14	●	13.5	3	43	60	107	14	140°			
NCD3H-SC 1400-107/060-S14	●	14	3	43	60	107	14	140°			
NCD3H-SC 1450-115/065-S16	●	14.5	3	45	65	115	16	140°			
NCD3H-SC 1500-115/065-S16	●	15	3	49	65	115	16	140°			
NCD3H-SC 1550-115/065-S16	●	15.5	3	49	65	115	16	140°			
NCD3H-SC 1600-115/065-S16	●	16	3	49	65	115	16	140°			
NCD3H-SC 1650-123/073-S18	●	16.5	3	52	73	123	18	140°			
NCD3H-SC 1700-123/073-S18	●	17	3	52	73	123	18	140°			
NCD3H-SC 1750-123/073-S18	●	17.5	3	52	73	123	18	140°			
NCD3H-SC 1800-123/073-S18	●	18	3	52	73	123	18	140°			
NCD3H-SC 1850-131/079-S20	●	18.5	3	55	79	131	20	140°			
NCD3H-SC 1900-131/079-S20	●	19	3	55	79	131	20	140°			
NCD3H-SC 1950-131/079-S20	●	19.5	3	55	79	131	20	140°			
NCD3H-SC 2000-131/079-S20	●	20	3	55	79	131	20	140°			

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

NCD5H-SC

NCD

- First choice for stainless steel and sticky free-cutting steels
- With coolant holes
- Self centering geometry for accurate holes
- AlCrN based multilayer coating with very low friction coefficient to reduce built up edge

5xD
💧 with coolant holes

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG			
NCD5H-SC 0300-066/028-S06	●	3	5	23	28	66	6	140°			
NCD5H-SC 0310-066/028-S06	●	3.1	5	23	28	66	6	140°			
NCD5H-SC 0320-066/028-S06	●	3.2	5	23	28	66	6	140°			
NCD5H-SC 0330-066/028-S06	●	3.3	5	23	28	66	6	140°			
NCD5H-SC 0340-066/028-S06	●	3.4	5	23	28	66	6	140°			
NCD5H-SC 0350-066/028-S06	●	3.5	5	23	28	66	6	140°			
NCD5H-SC 0360-066/028-S06	●	3.6	5	23	28	66	6	140°			
NCD5H-SC 0370-066/028-S06	●	3.7	5	23	28	66	6	140°			
NCD5H-SC 0380-074/036-S06	●	3.8	5	29	36	74	6	140°			
NCD5H-SC 0390-074/036-S06	●	3.9	5	29	36	74	6	140°			
NCD5H-SC 0400-074/036-S06	●	4	5	29	36	74	6	140°			
NCD5H-SC 0410-074/036-S06	●	4.1	5	29	36	74	6	140°			
NCD5H-SC 0420-074/036-S06	●	4.2	5	29	36	74	6	140°			
NCD5H-SC 0430-074/036-S06	●	4.3	5	29	36	74	6	140°			
NCD5H-SC 0440-074/036-S06	●	4.4	5	29	36	74	6	140°			
NCD5H-SC 0450-074/036-S06	●	4.5	5	29	36	74	6	140°			
NCD5H-SC 0460-074/036-S06	●	4.6	5	29	36	74	6	140°			
NCD5H-SC 0470-074/036-S06	●	4.7	5	29	36	74	6	140°			
NCD5H-SC 0480-082/044-S06	●	4.8	5	35	44	82	6	140°			
NCD5H-SC 0490-082/044-S06	●	4.9	5	35	44	82	6	140°			
NCD5H-SC 0500-082/044-S06	●	5	5	35	44	82	6	140°			
NCD5H-SC 0510-082/044-S06	●	5.1	5	35	44	82	6	140°			
NCD5H-SC 0520-082/044-S06	●	5.2	5	35	44	82	6	140°			
NCD5H-SC 0530-082/044-S06	●	5.3	5	35	44	82	6	140°			
NCD5H-SC 0540-082/044-S06	●	5.4	5	35	44	82	6	140°			
NCD5H-SC 0550-082/044-S06	●	5.5	5	35	44	82	6	140°			
NCD5H-SC 0560-082/044-S06	●	5.6	5	35	44	82	6	140°			
NCD5H-SC 0570-082/044-S06	●	5.7	5	35	44	82	6	140°			
NCD5H-SC 0580-082/044-S06	●	5.8	5	35	44	82	6	140°			
NCD5H-SC 0590-082/044-S06	●	5.9	5	35	44	82	6	140°			
NCD5H-SC 0600-082/044-S06	●	6	5	35	44	82	6	140°			
NCD5H-SC 0610-091/053-S08	●	6.1	5	43	53	91	8	140°			
NCD5H-SC 0620-091/053-S08	●	6.2	5	43	53	91	8	140°			
NCD5H-SC 0630-091/053-S08	●	6.3	5	43	53	91	8	140°			
NCD5H-SC 0640-091/053-S08	●	6.4	5	43	53	91	8	140°			
NCD5H-SC 0650-091/053-S08	●	6.5	5	43	53	91	8	140°			
NCD5H-SC 0660-091/053-S08	●	6.6	5	43	53	91	8	140°			
NCD5H-SC 0670-091/053-S08	●	6.7	5	43	53	91	8	140°			
NCD5H-SC 0680-091/053-S08	●	6.8	5	43	53	91	8	140°			
NCD5H-SC 0690-091/053-S08	●	6.9	5	43	53	91	8	140°			
NCD5H-SC 0700-091/053-S08	●	7	5	43	53	91	8	140°			
NCD5H-SC 0710-091/053-S08	●	7.1	5	43	53	91	8	140°			
NCD5H-SC 0720-091/053-S08	●	7.2	5	43	53	91	8	140°			
NCD5H-SC 0730-091/053-S08	●	7.3	5	43	53	91	8	140°			
NCD5H-SC 0740-091/053-S08	●	7.4	5	43	53	91	8	140°			
NCD5H-SC 0750-091/053-S08	●	7.5	5	43	53	91	8	140°			
NCD5H-SC 0760-091/053-S08	●	7.6	5	43	53	91	8	140°			
NCD5H-SC 0770-091/053-S08	●	7.7	5	43	53	91	8	140°			

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

- A - TURNING
- B - THREADING
- C - GROOVING
- D - MILLING
- E - DRILLING
- F - ACCESSORIES
- G - SPARE PARTS

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

Designation	Stock	DC	ULDR	LU	LCF	OAL	DCON	SIG			
NCD5H-SC 0780-091/053-S08	●	7.8	5	43	53	91	8	140°			
NCD5H-SC 0790-091/053-S08	●	7.9	5	43	53	91	8	140°			
NCD5H-SC 0800-091/053-S08	●	8	5	43	53	91	8	140°			
NCD5H-SC 0810-103/061-S10	●	8.1	5	48.85	61	103	10	140°			
NCD5H-SC 0820-103/061-S10	●	8.2	5	48.7	61	103	10	140°			
NCD5H-SC 0830-103/061-S10	●	8.3	5	48.55	61	103	10	140°			
NCD5H-SC 0840-103/061-S10	●	8.4	5	49	61	103	10	140°			
NCD5H-SC 0850-103/061-S10	●	8.5	5	49	61	103	10	140°			
NCD5H-SC 0860-103/061-S10	●	8.6	5	49	61	103	10	140°			
NCD5H-SC 0870-103/061-S10	●	8.7	5	49	61	103	10	140°			
NCD5H-SC 0880-103/061-S10	●	8.8	5	49	61	103	10	140°			
NCD5H-SC 0890-103/061-S10	●	8.9	5	49	61	103	10	140°			
NCD5H-SC 0900-103/061-S10	●	9	5	49	61	103	10	140°			
NCD5H-SC 0910-103/061-S10	●	9.1	5	49	61	103	10	140°			
NCD5H-SC 0920-103/061-S10	●	9.2	5	49	61	103	10	140°			
NCD5H-SC 0930-103/061-S10	●	9.3	5	49	61	103	10	140°			
NCD5H-SC 0940-103/061-S10	●	9.4	5	49	61	103	10	140°			
NCD5H-SC 0950-103/061-S10	●	9.5	5	49	61	103	10	140°			
NCD5H-SC 0960-103/061-S10	●	9.6	5	49	61	103	10	140°			
NCD5H-SC 0970-103/061-S10	●	9.7	5	49	61	103	10	140°			
NCD5H-SC 0980-103/061-S10	●	9.8	5	49	61	103	10	140°			
NCD5H-SC 0990-103/061-S10	●	9.9	5	49	61	103	10	140°			
NCD5H-SC 1000-103/061-S10	●	10	5	49	61	103	10	140°			
NCD5H-SC 1010-118/071-S12	●	10.1	5	52	71	118	12	140°			
NCD5H-SC 1020-118/071-S12	●	10.2	5	52	71	118	12	140°			
NCD5H-SC 1030-118/071-S12	●	10.3	5	52	71	118	12	140°			
NCD5H-SC 1040-118/071-S12	●	10.4	5	52	71	118	12	140°			
NCD5H-SC 1050-118/071-S12	●	10.5	5	52	71	118	12	140°			
NCD5H-SC 1060-118/071-S12	●	10.6	5	52	71	118	12	140°			
NCD5H-SC 1070-118/071-S12	●	10.7	5	52	71	118	12	140°			
NCD5H-SC 1080-118/071-S12	●	10.8	5	52	71	118	12	140°			
NCD5H-SC 1090-118/071-S12	●	10.9	5	52	71	118	12	140°			
NCD5H-SC 1100-118/071-S12	●	11	5	52	71	118	12	140°			
NCD5H-SC 1110-118/071-S12	●	11.1	5	52	71	118	12	140°			
NCD5H-SC 1120-118/071-S12	●	11.2	5	52	71	118	12	140°			
NCD5H-SC 1130-118/071-S12	●	11.3	5	52	71	118	12	140°			
NCD5H-SC 1140-118/071-S12	●	11.4	5	52	71	118	12	140°			
NCD5H-SC 1150-118/071-S12	●	11.5	5	52	71	118	12	140°			
NCD5H-SC 1160-118/071-S12	●	11.6	5	52	71	118	12	140°			
NCD5H-SC 1170-118/071-S12	●	11.7	5	52	71	118	12	140°			
NCD5H-SC 1180-118/071-S12	●	11.8	5	52	71	118	12	140°			
NCD5H-SC 1190-118/071-S12	●	11.9	5	52	71	118	12	140°			
NCD5H-SC 1200-118/071-S12	●	12	5	52	71	118	12	140°			
NCD5H-SC 1250-124/077-S14	●	12.5	5	63	77	124	14	140°			
NCD5H-SC 1300-124/077-S14	●	13	5	63	77	124	14	140°			
NCD5H-SC 1350-124/077-S14	●	13.5	5	63	77	124	14	140°			
NCD5H-SC 1400-124/077-S14	●	14	5	63	77	124	14	140°			
NCD5H-SC 1450-133/083-S16	●	14.5	5	67	83	133	16	140°			
NCD5H-SC 1500-133/083-S16	●	15	5	67	83	133	16	140°			
NCD5H-SC 1550-133/083-S16	●	15.5	5	67	83	133	16	140°			
NCD5H-SC 1600-133/083-S16	●	16	5	67	83	133	16	140°			
NCD5H-SC 1650-143/093-S18	●	16.5	5	75	93	143	18	140°			
NCD5H-SC 1700-143/093-S18	●	17	5	75	93	143	18	140°			
NCD5H-SC 1750-143/093-S18	●	17.5	5	75	93	143	18	140°			
NCD5H-SC 1800-143/093-S18	●	18	5	75	93	143	18	140°			
NCD5H-SC 1850-153/101-S20	●	18.5	5	81	101	153	20	140°			
NCD5H-SC 1900-153/101-S20	●	19	5	81	101	153	20	140°			
NCD5H-SC 1950-153/101-S20	●	19.5	5	81	101	153	20	140°			
NCD5H-SC 2000-153/101-S20	●	20	5	81	101	153	20	140°			

● stock standard, ○ non-standard stock, ▲ upcoming introduction, ▽ stock exhaustion

ISO 513	MATERIAL	HARDNESS HB	L/D	NCD GP			NCD H GP			NCD H SC		
				min	start	max	min	start	max	min	start	max
P1 - P2	Free cutting steel and low carbon (ex. 1.0715/9 smn 28/avp, 1.0503/c45)	≤ 200	3XD ÷ 5XD	80	100	120	100	130	160	100	130	160
P3 - P4	Medium and high alloy steel (ex. 1.7225/42 CrMo 4, 1.3505/100 Cr 6)	200 ÷ 300	3XD ÷ 5XD	60	80	100	80	110	140	80	110	140
P5 - P6	High tensile strength and tool steel (ex. 1.2344/X 40 CrMoV 5 1/ORVAR, Hardox400®)	300 ÷ 400	3XD ÷ 5XD	40	60	80	60	90	120	-	-	-
P7	Ferritic and martensitic stainless steel (ex. 1.4021/X 20 Cr 13/AISI420)	≤ 200	3XD ÷ 5XD	-	-	-	-	-	-	50	60	70
P8	Precipitation hardening stainless steel (ex. 1.4548/X 5 CrNiCuNb 17 4/17-4-PH)	≤ 450	3XD ÷ 5XD	-	-	-	-	-	-	20	25	30
M1	Austenitic stainless steel (ex. 1.4305/X 10 CrNiS 18 9/AISI303)	> 200	3XD ÷ 5XD	-	-	-	-	-	-	40	60	80
M2 - M3	Austenitic and Duplex stainless steel (ex. 1.4401/X 5 CrNiMo 17 12 2/AISI316)		3XD ÷ 5XD	-	-	-	-	-	-	20	30	40
K1	Grey cast iron (ex. 0.6025/GG 25/EN-GJL-250)	150 ÷ 250	3XD ÷ 5XD	80	90	100	100	120	140	-	-	-
K2	Nodular cast iron (ex. 0.7050/GGG 50/EN-GJS-500-7)	150 ÷ 350	3XD ÷ 5XD	40	60	80	60	90	120	-	-	-
S1 - S2 - S3	Fe/Ni/Co based heat resistant alloys (ex. Hastelloy, Inconel 625, Inconel 718)		3XD ÷ 5XD	-	-	-	-	-	-	30	40	50
S4 - S5	Titanium alloys (ex. TiAl2Sn4Zr2MoSi)		3XD ÷ 5XD	-	-	-	-	-	-	40	50	60

Complete workpiece materials p. H1.

A - TURNING

B - THREADING

C - GROOVING

D - MILLING

E - DRILLING

F - ACCESSORIES

G - SPARE PARTS

	ISO 513	MATERIAL	HARDNESS HB	TYPE	DC 3.00 ÷ 3.99			DC 4.00 ÷ 4.99			DC 5.00 ÷ 5.99		
					min	start	max	min	start	max	min	start	max
A - TURNING	P1 - P2	Free cutting steel and low carbon (ex. 1.0715/9 smn 28/avp, 1.0503/c45)	≤ 200	NCD GP	0.14	0.16	0.18	0.15	0.17	0.19	0.16	0.18	0.20
				NCD H GP	0.15	0.17	0.19	0.16	0.18	0.20	0.17	0.19	0.21
				NCD H SC	0.13	0.15	0.17	0.14	0.16	0.18	0.15	0.17	0.19
	P3 - P4	Medium and high alloy steel (ex. 1.7225/42 CrMo 4, 1.3505/100 Cr 6)	200 ÷ 300	NCD GP	0.10	0.12	0.14	0.11	0.13	0.15	0.12	0.14	0.16
				NCD H GP	0.11	0.13	0.15	0.12	0.14	0.16	0.13	0.15	0.17
				NCD H SC	0.09	0.11	0.13	0.10	0.12	0.14	0.11	0.13	0.15
B - THREADING	P5 - P6	High tensile strength and tool steel (ex. 1.2344/X 40 CrMoV 5 1/ORVAR, Hardox400®)	300 ÷ 400	NCD GP	0.08	0.10	0.12	0.09	0.11	0.13	0.10	0.12	0.14
				NCD H GP	0.08	0.10	0.13	0.09	0.12	0.14	0.10	0.13	0.15
				NCD H SC	-	-	-	-	-	-	-	-	-
	P7	Ferritic and martensitic stainless steel (ex. 1.4021/X 20 Cr 13/AISI420)	≤ 200	NCD GP	-	-	-	-	-	-	-	-	
				NCD H GP	-	-	-	-	-	-	-	-	
				NCD H SC	0.05	0.08	0.11	0.06	0.09	0.12	0.07	0.10	0.13
C - GROOVING	P8	Precipitation hardening stainless steel (ex. 1.4548/X 5 CrNiCuNb 17 4/17-4-PH)	≤ 450	NCD GP	-	-	-	-	-	-	-	-	
				NCD H GP	-	-	-	-	-	-	-	-	
				NCD H SC	0.06	0.07	0.08	0.05	0.07	0.09	0.06	0.08	0.10
	M1	Austenitic stainless steel (ex. 1.4305/X 10 CrNiS 18 9/AISI303)	> 200	NCD GP	-	-	-	-	-	-	-	-	
				NCD H GP	-	-	-	-	-	-	-	-	
				NCD H SC	0.02	0.05	0.08	0.03	0.06	0.09	0.06	0.08	0.10
D - MILLING	M2 - M3	Austenitic and Duplex stainless steel (ex. 1.4401/X 5 CrNiMo 17 12 2/AISI316)		NCD GP	-	-	-	-	-	-	-	-	
				NCD H GP	-	-	-	-	-	-	-	-	
				NCD H SC	0.02	0.04	0.06	0.03	0.05	0.07	0.04	0.06	0.08
	K1	Grey cast iron (ex. 0.6025/GG 25/EN-GJL-250)	150 ÷ 250	NCD GP	0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22
				NCD H GP	0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23
				NCD H SC	-	-	-	-	-	-	-	-	-
E - DRILLING	K2	Nodular cast iron (ex. 0.7050/GGG 50/EN-GJS-500-7)	150 ÷ 350	NCD GP	0.12	0.14	0.16	0.13	0.15	0.17	0.14	0.16	0.18
				NCD H GP	0.13	0.15	0.17	0.14	0.16	0.18	0.15	0.17	0.19
				NCD H SC	-	-	-	-	-	-	-	-	-
	S1 - S2 - S3	Fe/Ni/Co based heat resistant alloys (ex. Hastelloy, Inconel 625, Inconel 718)		NCD GP	-	-	-	-	-	-	-	-	
				NCD H GP	-	-	-	-	-	-	-	-	
				NCD H SC	0.01	0.02	0.04	0.01	0.03	0.05	0.02	0.04	0.06
F - ACCESSORIES	S4 - S5	Titanium alloys (ex. TiAl2Sn4Zr2MoSi)		NCD GP	-	-	-	-	-	-	-	-	
				NCD H GP	-	-	-	-	-	-	-	-	
				NCD H SC	0.01	0.03	0.05	0.02	0.04	0.06	0.03	0.05	0.07
G - SPARE PARTS	Complete workpiece materials p. H1.												

(fn: mm/rev)

DC 6.00 ÷ 6.99			DC 7.00 ÷ 7.99			DC 8.00 ÷ 8.99			DC 9.00 ÷ 9.99			DC 10.00 ÷ 10.99			DC 11.00 ÷ 11.99		
min	start	max	min	start	max	min	start	max	min	start	max	min	start	max	min	start	max
0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23	0.20	0.22	0.24	0.21	0.23	0.25	0.22	0.24	0.26
0.18	0.20	0.22	0.19	0.21	0.23	0.20	0.22	0.24	0.21	0.23	0.25	0.22	0.24	0.26	0.23	0.25	0.27
0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23	0.20	0.22	0.24	0.21	0.23	0.25
0.13	0.15	0.17	0.14	0.16	0.18	0.15	0.17	0.19	0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22
0.14	0.16	0.18	0.15	0.17	0.19	0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23
0.12	0.14	0.16	0.13	0.15	0.17	0.14	0.16	0.18	0.15	0.17	0.19	0.16	0.18	0.20	0.17	0.19	0.21
0.11	0.13	0.15	0.12	0.14	0.16	0.13	0.15	0.17	0.14	0.16	0.18	0.15	0.17	0.19	0.16	0.18	0.20
0.12	0.14	0.16	0.13	0.15	0.17	0.14	0.16	0.18	0.15	0.17	0.19	0.16	0.18	0.20	0.17	0.19	0.21
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.10	0.12	0.14	0.11	0.13	0.15	0.12	0.14	0.16	0.13	0.15	0.17	0.14	0.16	0.18	0.15	0.17	0.19
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.06	0.09	0.12	0.07	0.10	0.13	0.08	0.11	0.14	0.11	0.13	0.15	0.12	0.14	0.16	0.12	0.15	0.18
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.07	0.09	0.11	0.07	0.10	0.13	0.10	0.12	0.14	0.11	0.13	0.15	0.12	0.14	0.16	0.13	0.15	0.17
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.05	0.07	0.09	0.05	0.08	0.11	0.06	0.09	0.12	0.09	0.11	0.13	0.10	0.12	0.14	0.11	0.13	0.15
0.19	0.21	0.23	0.20	0.22	0.24	0.21	0.23	0.25	0.22	0.24	0.26	0.23	0.25	0.27	0.24	0.26	0.28
0.20	0.22	0.24	0.21	0.23	0.25	0.22	0.24	0.26	0.23	0.25	0.27	0.24	0.26	0.28	0.25	0.27	0.29
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.15	0.17	0.19	0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23	0.20	0.22	0.24
0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23	0.20	0.22	0.24	0.21	0.23	0.25
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.03	0.05	0.07	0.04	0.06	0.08	0.05	0.07	0.09	0.05	0.08	0.11	0.06	0.09	0.12	0.09	0.11	0.13
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.04	0.06	0.08	0.05	0.07	0.09	0.05	0.08	0.11	0.06	0.09	0.12	0.09	0.11	0.13	0.10	0.12	0.14

Complete workpiece materials p. H1.

(fn: mm/rev)

- A - TURNING
- B - THREADING
- C - GROOVING
- D - MILLING
- E - DRILLING
- F - ACCESSORIES
- G - SPARE PARTS

	ISO 513	MATERIAL	HARDNESS HB	TYPE	DC 12.00 ÷ 12.99			DC 13.00 ÷ 13.99			DC 14.00 ÷ 14.99		
					min	start	max	min	start	max	min	start	max
A - TURNING	P1 - P2	Free cutting steel and low carbon (ex. 1.0715/9 smn 28/avp, 1.0503/c45)	≤ 200	NCD GP	0.23	0.25	0.27	0.24	0.26	0.28	0.25	0.27	0.29
				NCD H GP	0.24	0.26	0.28	0.25	0.27	0.29	0.26	0.28	0.30
				NCD H SC	0.22	0.24	0.26	0.23	0.25	0.27	0.24	0.26	0.28
	P3 - P4	Medium and high alloy steel (ex. 1.7225/42 CrMo 4, 1.3505/100 Cr 6)	200 ÷ 300	NCD GP	0.19	0.21	0.22	0.20	0.22	0.24	0.21	0.23	0.25
				NCD H GP	0.20	0.22	0.24	0.21	0.23	0.25	0.22	0.24	0.26
				NCD H SC	0.18	0.20	0.22	0.19	0.21	0.23	0.20	0.22	0.24
B - THREADING	P5 - P6	High tensile strength and tool steel (ex. 1.2344/X 40 CrMoV 5 1/ORVAR, Hardox400®)	300 ÷ 400	NCD GP	0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23
				NCD H GP	0.18	0.20	0.22	0.19	0.21	0.23	0.20	0.22	0.24
				NCD H SC	-	-	-	-	-	-	-	-	-
C - GROOVING	P7	Ferritic and martensitic stainless steel (ex. 1.4021/X 20 Cr 13/AISI420)	≤ 200	NCD GP	-	-	-	-	-	-	-	-	
				NCD H GP	-	-	-	-	-	-	-	-	
				NCD H SC	0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22
	P8	Precipitation hardening stainless steel (ex. 1.4548/X 5 CrNiCuNb 17 4/17-4-PH)	≤ 450	NCD GP	-	-	-	-	-	-	-	-	
				NCD H GP	-	-	-	-	-	-	-	-	
				NCD H SC	0.13	0.16	0.19	0.16	0.18	0.20	0.17	0.19	0.21
D - MILLING	M1	Austenitic stainless steel (ex. 1.4305/X 10 CrNiS 18 9/AISI303)	> 200	NCD GP	-	-	-	-	-	-	-	-	
				NCD H GP	-	-	-	-	-	-	-	-	
				NCD H SC	0.14	0.16	0.18	0.15	0.17	0.19	0.16	0.18	0.20
	M2 - M3	Austenitic and Duplex stainless steel (ex. 1.4401/X 5 CrNiMo 17 12 2/AISI316)		NCD GP	-	-	-	-	-	-	-	-	
				NCD H GP	-	-	-	-	-	-	-	-	
				NCD H SC	0.12	0.14	0.16	0.13	0.15	0.17	0.14	0.16	0.18
E - DRILLING	K1	Grey cast iron (ex. 0.6025/GG 25/EN-GJL-250)	150 ÷ 250	NCD GP	0.25	0.27	0.29	0.26	0.28	0.30	0.27	0.29	0.31
				NCD H GP	0.26	0.28	0.30	0.27	0.29	0.32	0.28	0.30	0.33
				NCD H SC	-	-	-	-	-	-	-	-	-
	K2	Nodular cast iron (ex. 0.7050/GGG 50/EN-GJS-500-7)	150 ÷ 350	NCD GP	0.21	0.23	0.25	0.22	0.24	0.26	0.23	0.25	0.27
				NCD H GP	0.22	0.24	0.26	0.23	0.25	0.27	0.24	0.26	0.28
				NCD H SC	-	-	-	-	-	-	-	-	-
F - ACCESSORIES	S1 - S2 - S3	Fe/Ni/Co based heat resistant alloys (ex. Hastelloy, Inconel 625, Inconel 718)		NCD GP	-	-	-	-	-	-	-	-	
				NCD H GP	-	-	-	-	-	-	-	-	
				NCD H SC	0.10	0.12	0.14	0.11	0.13	0.15	0.12	0.14	0.16
G - SPARE PARTS	S4 - S5	Titanium alloys (ex. TiAl2Sn4Zr2MoSi)		NCD GP	-	-	-	-	-	-	-	-	
				NCD H GP	-	-	-	-	-	-	-	-	
				NCD H SC	0.11	0.13	0.15	0.12	0.14	0.16	0.13	0.15	0.17

Complete workpiece materials p. H1.

(fn: mm/rev)

DC 15.00 ÷ 15.99			DC 16.00 ÷ 16.99			DC 17.00 ÷ 17.99			DC 18.00 ÷ 18.99			DC 19.00 ÷ 19.99			DC 20.00 ÷ 20.99		
min	start	max	min	start	max	min	start	max	min	start	max	min	start	max	min	start	max
0.26	0.28	0.30	0.29	0.29	0.31	0.28	0.30	0.32	0.29	0.31	0.33	0.30	0.32	0.34	0.31	0.33	0.35
0.27	0.29	0.32	0.30	0.30	0.33	0.29	0.32	0.34	0.30	0.33	0.35	0.32	0.34	0.36	0.33	0.35	0.37
0.25	0.27	0.29	0.30	0.30	0.30	0.26	0.29	0.32	0.27	0.30	0.33	0.30	0.32	0.34	0.31	0.33	0.35
0.22	0.24	0.26	0.23	0.25	0.27	0.24	0.26	0.28	0.25	0.27	0.29	0.26	0.28	0.30	0.27	0.29	0.31
0.23	0.25	0.27	0.24	0.26	0.28	0.25	0.27	0.29	0.26	0.28	0.30	0.27	0.29	0.32	0.28	0.30	0.33
0.21	0.23	0.25	0.22	0.24	0.26	0.23	0.25	0.27	0.24	0.26	0.28	0.25	0.27	0.29	0.26	0.28	0.30
0.20	0.22	0.24	0.21	0.23	0.25	0.22	0.24	0.26	0.23	0.25	0.27	0.24	0.26	0.28	0.25	0.27	0.29
0.21	0.23	0.25	0.22	0.24	0.26	0.23	0.25	0.27	0.24	0.26	0.28	0.25	0.27	0.29	0.26	0.28	0.30
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.19	0.21	0.23	0.20	0.22	0.24	0.21	0.23	0.25	0.22	0.24	0.26	0.23	0.25	0.27	0.24	0.26	0.28
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.17	0.20	0.23	0.18	0.21	0.24	0.21	0.23	0.25	0.22	0.24	0.26	0.22	0.25	0.28	0.24	0.26	0.28
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23	0.20	0.22	0.24	0.21	0.23	0.25	0.22	0.24	0.26
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.15	0.17	0.19	0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23	0.20	0.22	0.24
0.28	0.30	0.32	0.29	0.31	0.33	0.30	0.32	0.34	0.31	0.33	0.35	0.32	0.34	0.36	0.33	0.35	0.37
0.29	0.32	0.34	0.30	0.33	0.35	0.32	0.34	0.36	0.33	0.35	0.37	0.34	0.36	0.38	0.35	0.37	0.39
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.24	0.26	0.28	0.25	0.27	0.29	0.26	0.28	0.30	0.27	0.29	0.31	0.28	0.30	0.32	0.29	0.31	0.33
0.25	0.27	0.29	0.26	0.28	0.30	0.27	0.29	0.32	0.28	0.30	0.33	0.29	0.32	0.34	0.30	0.33	0.35
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.13	0.15	0.17	0.14	0.16	0.18	0.15	0.17	0.19	0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.14	0.16	0.18	0.15	0.17	0.19	0.16	0.18	0.20	0.17	0.19	0.21	0.18	0.20	0.22	0.19	0.21	0.23

Complete workpiece materials p. H1.

(fn: mm/rev)

- A - TURNING
- B - THREADING
- C - GROOVING
- D - MILLING
- E - DRILLING
- F - ACCESSORIES
- G - SPARE PARTS