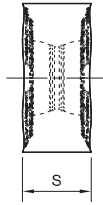
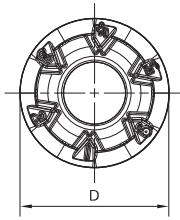


RNPJ-MM  
RNPJ-MH



- MM geometry is for general purpose, especially for steel.
- MH geometry is the first choice for heavy applications, cast iron, and high-strength steels.

● first choice  
○ alternate choice

P	●	●	●	●	●	●
M	○	○	○	○	○	○
K	●	○	○	○	○	○
N	○	○	○	○	○	○
S	○	○	○	○	○	○
H	○	○	○	○	○	○

■ RNPJ-MM

catalogue number	cutting edges	D	S	WK15CM	WP20CM	WP25PM	WS30PM	WU35PM	WP35CM	WP40PM
RNPJ1605M0SMM	12	16,00	6,35	●	○	○	○	○	○	○

■ RNPJ-MH

catalogue number	cutting edges	D	S	WK15CM	WP20CM	WP25PM	WS30PM	WU35PM	WP35CM	WP40PM
RNPJ1605M0SMH	12	16,00	6,35	○	○	○	○	○	○	○

Recommended Starting Speeds

■ Recommended Starting Speeds [m/min]

Material Group		WK15CM			WP20CM			WP25PM			WS30PM		
P	1	-	-	-	660	580	540	395	340	325	-	-	-
	2	-	-	-	410	370	330	330	290	240	-	-	-
	3	-	-	-	370	330	305	305	260	210	-	-	-
	4	-	-	-	275	260	230	270	220	180	-	-	-
	5	-	-	-	330	300	275	220	205	180	-	-	-
	6	-	-	-	230	205	175	200	150	120	-	-	-
M	1	-	-	-	270	240	210	245	215	200	270	240	220
	2	-	-	-	245	210	190	220	190	155	245	215	175
	3	-	-	-	190	175	150	170	145	115	185	160	125
K	1	505	460	410	430	390	355	275	245	220	-	-	-
	2	400	355	330	340	305	280	215	190	180	-	-	-
	3	335	300	275	290	260	240	180	160	145	-	-	-
N	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-
S	1	-	-	-	-	-	-	50	40	30	55	50	35
	2	-	-	-	-	-	-	50	40	30	55	50	35
	3	-	-	-	-	-	-	60	50	30	65	55	35
	4	-	-	-	-	-	-	85	60	40	100	70	50
H	1	-	-	-	170	140	115	145	110	85	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-

(Recommended Starting Speeds [m/min] – continued)

Material Group		WU35PM			WP35CM			WP40PM		
P	1	310	<b>275</b>	260	545	<b>475</b>	445	355	<b>310</b>	295
	2	265	<b>230</b>	190	335	<b>305</b>	275	300	<b>260</b>	215
	3	240	<b>205</b>	170	305	<b>275</b>	245	275	<b>235</b>	190
	4	215	<b>180</b>	145	230	<b>210</b>	190	245	<b>205</b>	160
	5	180	<b>160</b>	145	310	<b>275</b>	250	205	<b>185</b>	160
	6	155	<b>120</b>	95	190	<b>160</b>	130	180	<b>140</b>	110
M	1	205	<b>180</b>	160	245	<b>220</b>	185	235	<b>205</b>	185
	2	185	<b>155</b>	130	220	<b>190</b>	170	210	<b>180</b>	150
	3	140	<b>120</b>	95	175	<b>155</b>	140	155	<b>140</b>	110
K	1	-	-	-	355	<b>320</b>	290	-	-	-
	2	-	-	-	280	<b>250</b>	230	-	-	-
	3	-	-	-	235	<b>210</b>	190	-	-	-
N	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
S	1	40	<b>35</b>	30	-	-	-	50	<b>40</b>	35
	2	40	<b>35</b>	30	-	-	-	50	<b>40</b>	35
	3	55	<b>40</b>	30	-	-	-	60	<b>50</b>	35
	4	70	<b>55</b>	35	80	<b>60</b>	40	80	<b>60</b>	40
H	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-

NOTE: FIRST choice starting speeds are in **bold** type.  
As the average chip thickness increases, the speed should be decreased.

Recommended Starting Feeds

■ Recommended Starting Feeds [mm]

Light Machining	General Purpose	Heavy Machining
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At 8,00 Axial Depth of Cut (ap)

Insert Geometry	Programmed Feed per Tooth (fz) as a % of Radial Depth of Cut (ae)															Insert Geometry
	5%			10%			20%			30%			40-100%			
ML	0,12	<b>0,37</b>	0,48	0,09	<b>0,27</b>	0,35	0,07	<b>0,20</b>	0,26	0,06	<b>0,17</b>	0,23	0,05	<b>0,16</b>	0,21	ML
MM	0,28	<b>0,70</b>	0,81	0,21	<b>0,50</b>	0,58	0,15	<b>0,38</b>	0,44	0,13	<b>0,33</b>	0,38	0,12	<b>0,30</b>	0,35	MM
MH	0,53	<b>0,70</b>	1,17	0,38	<b>0,50</b>	0,84	0,29	<b>0,38</b>	0,63	0,25	<b>0,33</b>	0,55	0,23	<b>0,30</b>	0,50	MH

At 4,00 Axial Depth of Cut (ap)

Insert Geometry	Programmed Feed per Tooth (fz) as a % of Radial Depth of Cut (ae)															Insert Geometry
	5%			10%			20%			30%			40-100%			
ML	0,14	<b>0,43</b>	0,56	0,10	<b>0,31</b>	0,40	0,08	<b>0,23</b>	0,30	0,07	<b>0,20</b>	0,26	0,06	<b>0,18</b>	0,24	ML
MM	0,33	<b>0,81</b>	0,94	0,24	<b>0,58</b>	0,67	0,18	<b>0,43</b>	0,50	0,16	<b>0,38</b>	0,44	0,14	<b>0,35</b>	0,40	MM
MH	0,62	<b>0,81</b>	1,36	0,44	<b>0,58</b>	0,97	0,33	<b>0,43</b>	0,72	0,29	<b>0,38</b>	0,63	0,27	<b>0,35</b>	0,58	MH

At 2,00 Axial Depth of Cut (ap)

Insert Geometry	Programmed Feed per Tooth (fz) as a % of Radial Depth of Cut (ae)															Insert Geometry
	5%			10%			20%			30%			40-100%			
ML	0,19	<b>0,56</b>	0,73	0,14	<b>0,40</b>	0,53	0,10	<b>0,30</b>	0,40	0,09	<b>0,26</b>	0,34	0,08	<b>0,24</b>	0,32	ML
MM	0,43	<b>1,06</b>	1,24	0,31	<b>0,76</b>	0,89	0,23	<b>0,57</b>	0,66	0,20	<b>0,50</b>	0,57	0,19	<b>0,45</b>	0,53	MM
MH	0,81	<b>1,06</b>	1,79	0,58	<b>0,76</b>	1,28	0,44	<b>0,57</b>	0,95	0,38	<b>0,50</b>	0,83	0,35	<b>0,45</b>	0,76	MH

At 1,00 Axial Depth of Cut (ap)

Insert Geometry	Programmed Feed per Tooth (fz) as a % of Radial Depth of Cut (ae)															Insert Geometry
	5%			10%			20%			30%			40-100%			
ML	0,26	<b>0,77</b>	1,01	0,19	<b>0,55</b>	0,73	0,14	<b>0,41</b>	0,54	0,12	<b>0,36</b>	0,47	0,11	<b>0,33</b>	0,43	ML
MM	0,59	<b>1,46</b>	1,70	0,43	<b>1,04</b>	1,21	0,32	<b>0,78</b>	0,90	0,28	<b>0,68</b>	0,79	0,25	<b>0,62</b>	0,72	MM
MH	1,11	<b>1,46</b>	2,48	0,80	<b>1,04</b>	1,75	0,60	<b>0,78</b>	1,30	0,52	<b>0,68</b>	1,13	0,48	<b>0,62</b>	1,03	MH

NOTE: Use "Light Machining" value as starting feed rate.