

HONING HEADS FOR HIGH PRODUCTION HONING MACHINES

EXPANSION BY ROTATION OF INTERNAL AXIS

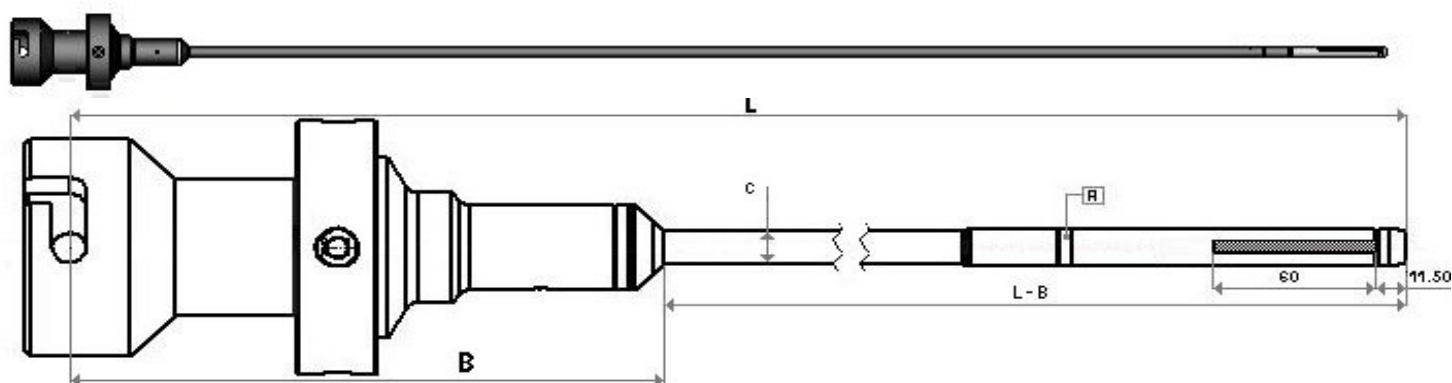


FOR VERTICAL AND HORIZONTAL HONING MACHINES

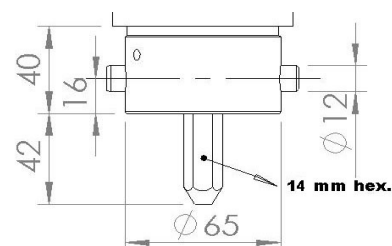
DIAMETER RANGE FROM 15,2 TO 148 mm

toningtec

A SERIES : 15,2 ÷ 26 DIAMETER RANGE



MACHINE REQUIREMENTS



This "A" mandrel series for small diameters, are supplied all together (machine complement, honing bar and mandrel). We need a complete set for each diameter range.

Only there is one universal joint due to the elasticity of the honing bar.

Ø RANGE	REFERENCE ²	L max.	L min.	C	B	STONE-HOLDERS Qty. per mandrel	ABRASIVE DIMENSIONS ⁶
15,2 ÷ 17	R65/152/L ¹	2000	1200	14	219,5	3	60x3x2,5/1,5
16,5 ÷ 18,3	R65/165/L ¹	2200	1400	16	218,5	3	60x3x2,5/1,5
18,3 ÷ 20	R65/183/L ¹	2600	1600	18	216,5	4	60x3x2,5/1,5
20 ÷ 22	R65/200/L ¹	2600	1600	18	216,5	4	60x3x2,5/1,5
22 ÷ 24	R65/220/L ¹	2600	1600	18	216,5	4	60x3x2,5/1,5
24 ÷ 26	R65/240/L ¹	2600	1600	18	216,5	4	60x3x2,5/1,5

SPARE PARTS⁵

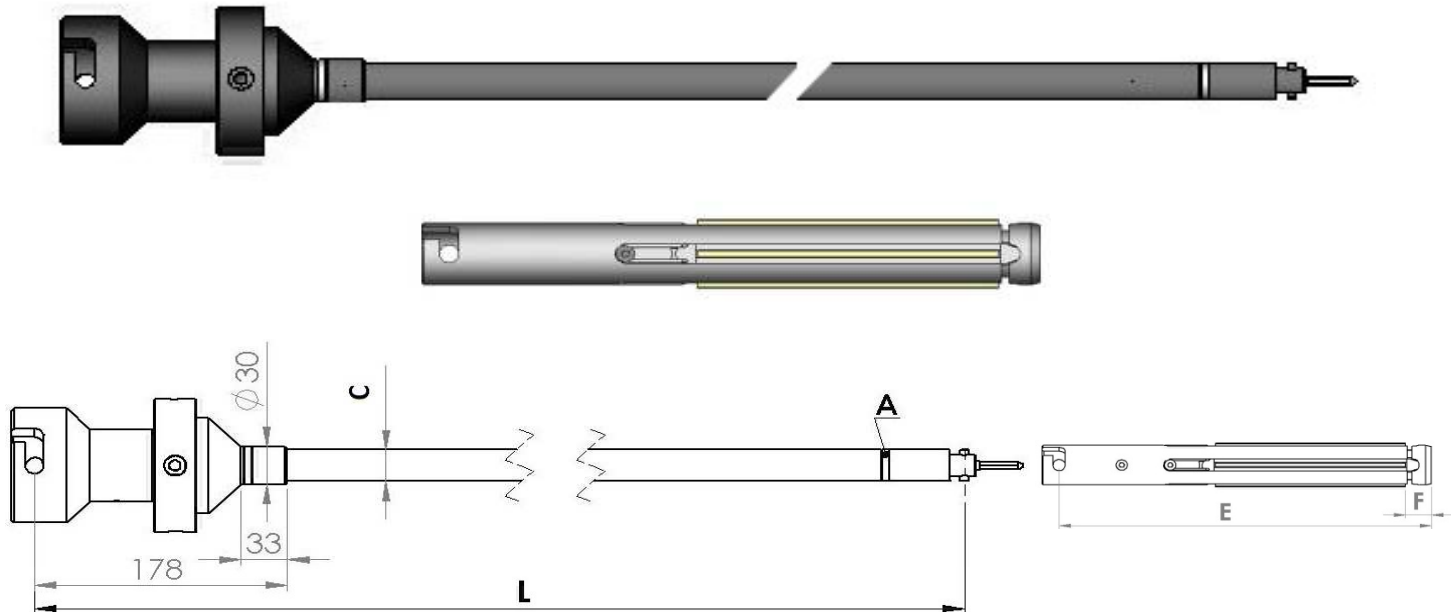
Ø RANGE	ASSEMBLY REFERENCE	HONING HEAD ³	STONE-HOLDERS (unit)	" A" UNION RING ⁴	RETAINER SPRING	O - RING
15,2 ÷ 17	1357-115	1331-00	1331-03	1331-02	1285-05	ID12 x 2
16,5 ÷ 18,3	1357-120	1330-00	1330-03	1330-02	1285-05	ID13 x 2
18,3 ÷ 20	1357-190	1407-00	1285-8-04	1276-24	1285-05	ID14 x 2
20 ÷ 22	1357-130	1285-00	1285-8-01	1276-24	1285-05	ID15 x 2
22 ÷ 24	1357-131	1286-00	1285-8-02	1276-24	1285-05	ID17 x 2
24 ÷ 26	1357-132	1287-00	1285-8-03	1276-24	1285-05	ID19 x 2

1. Total length "L" must to be specified between "L max." and "L min."
2. Stone holders included in the reference. Abrasive, welding and dressing not included in the reference.
3. Without stoneholders
4. Union ring must to be changed if it is damaged and anytime that the honing head is disassembled
5. Basic spare parts. Contact for other spare parts references mentioning the assembly reference.
6. See pages 5 / 6 for abrasive quality and references.

B SERIES : 26 ÷ 39 DIAMETER RANGE

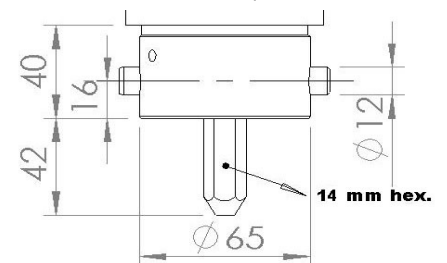


In this "B" mandrel series the mandrel and the honing bar are two different pieces .
Only there is one universal joint due to the elasticity of the honing bar.



Ø RANGE	HONING BAR REFERENCE ¹	L max.	L min.	C	"A" RING ⁴
26 ÷ 32	R65/25/17/L ¹	3500	1800	25	1331-02
31 ÷ 39					

MACHINE REQUIREMENTS



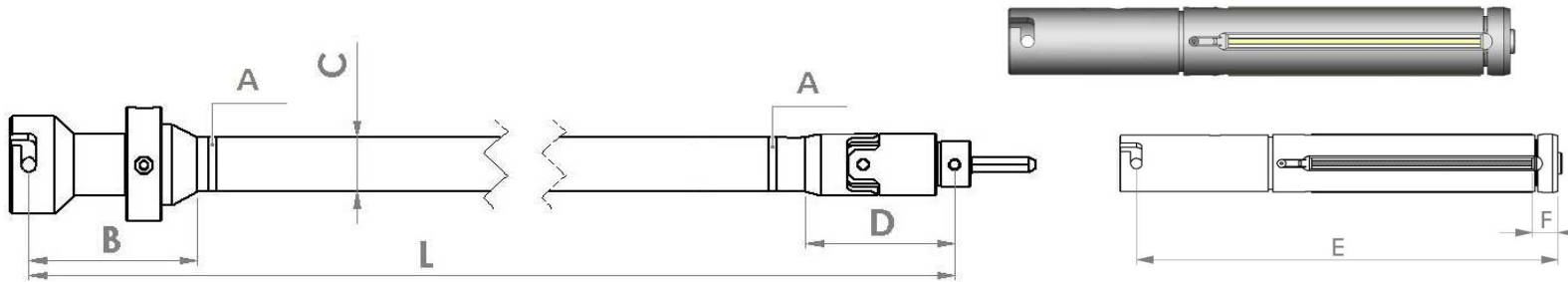
Ø RANGE	HONING HEAD ²	E	F	RETAINER SPRING	O - RING	STONEHOLDERS RANGE	STONE-HOLDERS ³	STONEHOLDERS Qty. per mandrel	ABRASIVE DIMENSIONS ⁵
26 ÷ 32	1313-00A	196	14	1283-16	ID17 x 2	26 ÷ 30	1313-04	4	100x3x3/2
						28,5 ÷ 33	1313-13	4	
31 ÷ 39	1314-00	251	16	1283-16	ID21 x 2	31 ÷ 33	1314-04	4	150x5x5/3
						33 ÷ 35	1314-14	4	
						35 ÷ 37	1314-12	4	
						37 ÷ 39	1314-02	4	

1. Total length "L" must to be specified between "L max." and "L min."
2. Stone holders not included in the reference.
3. Abrasive it is not included in the stoneholders reference
4. "A" Union ring must to be changed if it is damaged and anytime that the honing head is disassembled
5. See page 5/6 for abrasive quality and references.

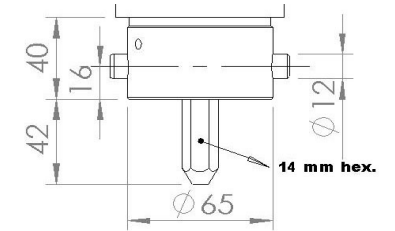
C SERIES : 36,5 ÷ 148 DIAMETER RANGE



In this "C" mandrel series the mandrel and the honing bar are two different pieces.



MACHINE REQUIREMENTS



Ø RANGE	HONING BAR REFERENCE ¹	B	C	D	"A" RING ⁴	HONING HEAD ²	E	F	RETAINER SPRING	O - RING	STONEHOLDERS RANGE	STONE-HOLDERS ³	STONEHOLDERS Qty. per mandrel	ABRASIVE DIMENSIONS ⁵
36,5 ÷ 43,7	R65/30/24/L	144	30	**	1276-10	1315-00	268	16	1278-17	ID 28 x 2	36,5 ÷ 38,9	1315-01	4	X type See page 5
											38,9 ÷ 41,1	1315-12A		
											41,4 ÷ 43,7	1315-02		
43,7 ÷ 50,8	R65/35/28/L	144	35	106	1257-25	1373-00	278	16	1278-17	ID 28 x 2	43,7 ÷ 46	1315-04A	4	X type See page 5
											46 ÷ 48,5	1315-03		
											48,5 ÷ 50,8	1315-14		
49,3 ÷ 65,3	R65/40/35/L	146	40	110	1263-11	1316-00	350,5	17,5	1278-17	ID 36 x 2,5	49,3 ÷ 52,8	1316-13	4	Y type See page 5
											52,5 ÷ 55,8	1316-03		
											55,7 ÷ 59	1316-12A		
											58,9 ÷ 62,1	1316-04A		
											62 ÷ 65,3	1316-02		
61,2 ÷ 81	R65/50/42/L	145	50	128	1263-52	1317-00	383	23,5	1278-17	ID 44 x 2,5	61,2 ÷ 68,3	1317-04	4	Y type See page 5
											67,5 ÷ 74,7	1317-15		
											73,9 ÷ 81	1317-02		
74 ÷ 100	R65/50/42/L	145	50	128	1263-52	1318-00	385	23,5	-----	ID 56 x 2,5	74 ÷ 81	1318-12	4	Y type See page 5
											80,3 ÷ 87,3	1318-02		
											86,7 ÷ 93,6	1318-13		
											93 ÷ 100	1318-04		
100 ÷ 148	R65/50/65/L	145	50	145	1263-52	1351-00	398	23,5	-----	ID 66 x 3	100 ÷ 107,6	1351-08	6	200 x 13 x 13
											107,6 ÷ 115,2	1351-09		
											115,2 ÷ 122,8	1351-10		
											122,6 ÷ 130,2	1351-11	6	Y type See page 5
											100 ÷ 116	1351-07		
											116 ÷ 132	1351-04		
											132 ÷ 148	1351-12		

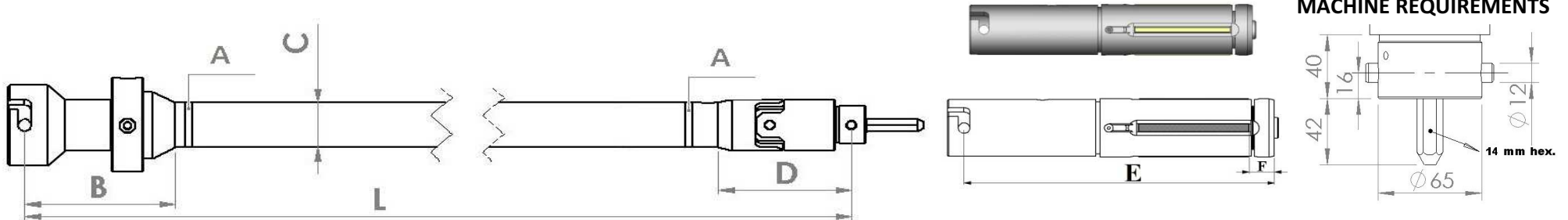
1. Length must to be specified for the correct reference
2. Stone holders not included in the reference.
3. Abrasive it is not included in the stoneholders reference
4. Union ring must to be changed if it is damaged and anytime that the honing head is disassembled
5. See page 5 / 6 for abrasive quality and references.

** The "D" length has the same diameter of the honing bar. ("C" diameter)

D SERIES : 36,5 ÷ 148 DIAMETER RANGE (SHORT MANDRELS)



In this "D" mandrel series the mandrel and the honing bar are two different pieces .



Ø RANGE	HONING BAR REFERENCE ¹	B	C	D	" A " RING ⁴	HONING HEAD ²	E	F	RETAINER SPRING	O - RING	STONEHOLDERS RANGE	STONE-HOLDERS ³	STONEHOLDERS Qty. per mandrel	ABRASIVE DIMENSIONS ⁵			
36,5 ÷ 43,7	R65/30/24/L	144	30	**	1276-10	1348-00	219	14	1278-17	ID 28 x 2	36,5 ÷ 38,9	1348-04	4	Z type See page 5			
											38,9 ÷ 41,1						
											41,4 ÷ 43,7						
43,7 ÷ 50,8	R65/35/28/L	144	35	106	1257-25				1278-17	ID 28 x 2	43,7 ÷ 46		4				
											46 ÷ 48,5						
											48,5 ÷ 50,8						
49,3 ÷ 65,3	R65/40/35/L	146	40	110	1263-11				1278-17	ID 36 x 2,5	49,3 ÷ 52,8		4				
											52,5 ÷ 55,8						
											55,7 ÷ 59						
											58,9 ÷ 62,1						
											62 ÷ 65,3						
61,2 ÷ 81						1327-00	283	21	1278-17	ID 44 x 2,5	61,2 ÷ 68,3	1327-04	4				
											67,5 ÷ 74,7						
											73,9 ÷ 81						
74 ÷ 100	R65/50/42/L	145	50	128	1263-52					ID 56 x 2,5	74 ÷ 81	1328-12	4				
											80,3 ÷ 87,3						
											86,7 ÷ 93,6						
											93 ÷ 100						
100 ÷ 148	R65/50/65/L	145	50	145	1263-52					ID 66 x 3	100 ÷ 116		6				
											116 ÷ 132						
											132 ÷ 148						

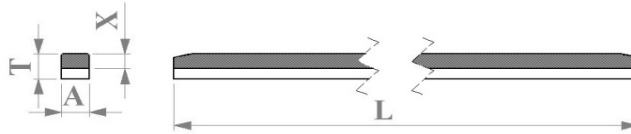
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2. Stone holders not included in the reference.
3. Abrasive it is not included in the stoneholders reference
4. "A" Union ring must to be changed if it is damaged and anytime that the honing head is disassembled
5. See page 5 / 6 for abrasive quality and references.

** The "D" length has the same diameter of the honing bar. ("C" diameter)

All the superabrasives references must to specify the physical dimensions and the abrasive reference.

PHYSICAL DIMENSIONS

For not mounted abrasives L x A x T/X :



Not mounted abrasives goes directly tin welded or glued on the stone-holders

L x A x T dimensions are specified in the honing head chart

For composed abrasives :



NORMAL SERIES

REFERENCE	LENGTH L	EXISTING PROFILES	REFERENCE	LENGTH L	EXISTING PROFILES
X1	150		Y1	200	
X2			Y2		
X3			Y3		
X4			Y4		

SHORT SERIES

REFERENCE	LENGTH L	EXISTING PROFILES
Z1	100	
Z2		
Z3		
Z4		

For abrasive quality see page 6



ABRASIVE REFERENCE

The abrasive reference is formed by:

ABRASIVE TYPE	B	126	0612	HONINGTEC PRODUCTION CODE
	GRIT SIZE			
Diamond	15	126		Supplied for Honingtec after the first production and it corresponds to the internal production parameters. To obtain this code the first time, it is necessary to contact with the technical service. There is no relation with the application or grit size.
Borazon	30	181		
	54	252		
	76	427		
	91			

The roughness chart, only it is approximate.

The quality of honing oil is of great importance. We recommend the use of HONINGTEC honing oils.

For more details, contact with technical service.

Ra (µm) CHART

MATERIAL	GRIT SIZE									Recommended abrasive type
	427	252	181	126	91	76	54	30	15	
Bimetallic pipes (without WC)	2,4	1,8	1,2	1	0,7	0,5	0,4			Borazon
Bimetallic pipes (with WC)		1,7	1,1	0,9	0,65	0,5	0,4			Diamond
Cast Iron		2,8	2,3	0,9	0,5	0,5	0,3	0,25	0,12	Diamond
Hard steel > 45HRC		2,3	2	1,1	0,9	0,9	0,55	0,2	0,08	Borazon
Soft steel < 45 HRC		2,5	2,3	1,3	1,1	1,1	0,65	0,25	0,10	Borazon
Aluminium, Brass, Bronze			2,5	1,4	1,1	1,1	0,6	0,25	0,14	Diamond