

# D'ANDREA

## TECHNICAL DATA

- TECHNICAL DATA
- TECHNISCHE DATEN
- DATOS TÉCNICOS
- DONNÉES TECHNIQUES
- DATI TECNICI

246

Werkzeuge  
Werkzeugwechsel  
Ausführung mit Datenträger

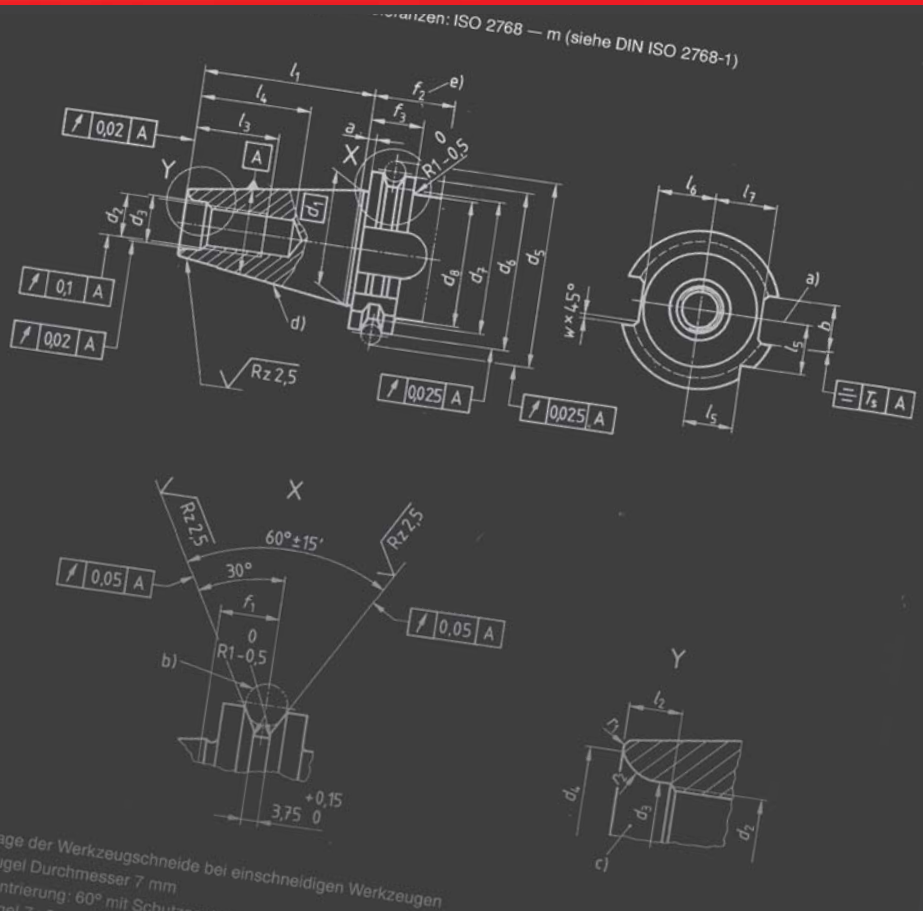
Oktober 1995  
**DIN**  
69871-1

Ersatz für Ausgabe 1990-03

Stahlkegelschaft, NC-Maschine

Spannvorrichtung (FWS),  
manuell und automati-  
siert

ISO  
Zentrierung  
Engelung

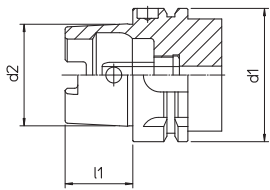




- ARBORS STANDARDS
- NORMEN FÜR GRUNDAUFNAHMEN
- NORMAS ACOPLAMIENTOS BASE
- NORMES MANDRINS
- NORME ATTACCHI BASE

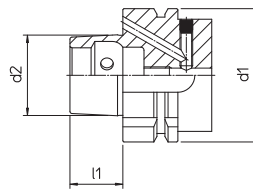
DIN 69893

## HSK-A



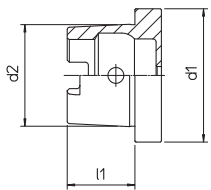
HSK-A	d1	d2	l1
32	32	24	16
40	40	30	20
50	50	38	25
63	63	48	32
80	80	60	40
100	100	75	50

## HSK-B



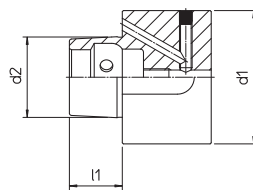
HSK-B	d1	d2	l1
-	-	-	-
40	40	24	16
50	50	30	20
63	63	38	25
80	80	48	32
100	100	60	40

## HSK-C



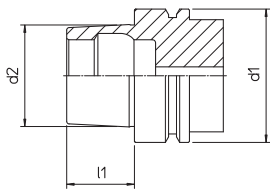
HSK-C	d1	d2	l1
32	32	24	16
40	40	30	20
50	50	38	25
63	63	48	32
80	80	60	40
100	100	75	50

## HSK-D



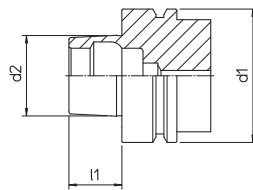
HSK-D	d1	d2	l1
-	-	-	-
40	40	24	16
50	50	30	20
63	63	38	25
80	80	48	32
100	100	60	40

## HSK-E



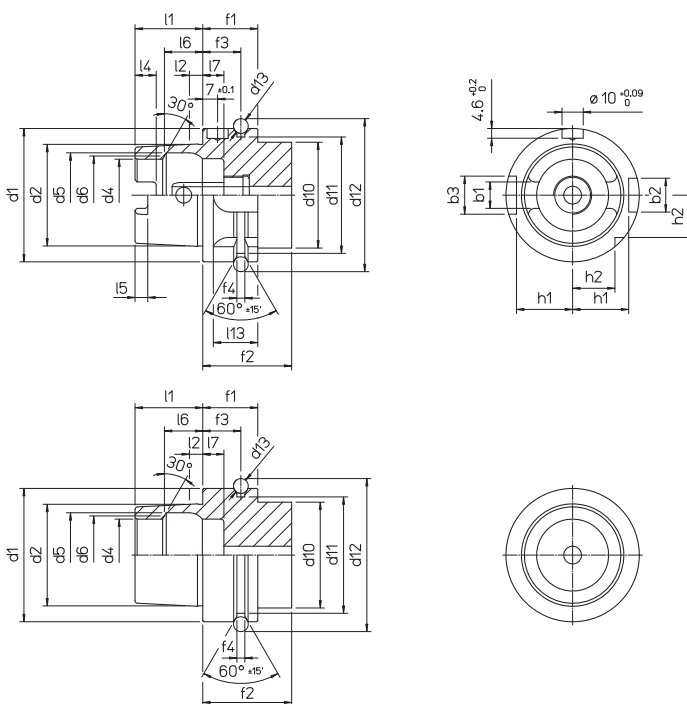
HSK-E	d1	d2	l1
32	32	24	16
40	40	30	20
50	50	38	25
63	63	48	32
-	-	-	-

## HSK-F



HSK-F	d1	d2	l1
-	-	-	-
-	-	-	-
50	50	30	20
63	63	38	25
80	80	48	32

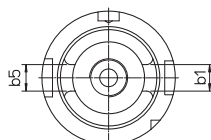
## HSK-A HSK-E



HSK	32	40	50	63	80	100
b1 $\begin{smallmatrix} +0.04 \\ -0.04 \end{smallmatrix}$	7.05	8.05	10.54	12.54	16.04	20.02
b2 H10	7	9	12	16	18	20
b3 H10	9	11	14	18	20	22
d1 h10	32	40	50	63	80	100
d2 $\begin{smallmatrix} +0.007 \\ +0.005 \end{smallmatrix}$	24 $\begin{smallmatrix} +0.007 \\ +0.005 \end{smallmatrix}$	30 $\begin{smallmatrix} +0.007 \\ +0.005 \end{smallmatrix}$	38 $\begin{smallmatrix} +0.009 \\ +0.006 \end{smallmatrix}$	48 $\begin{smallmatrix} +0.011 \\ +0.007 \end{smallmatrix}$	60 $\begin{smallmatrix} +0.013 \\ +0.008 \end{smallmatrix}$	75 $\begin{smallmatrix} +0.015 \\ +0.009 \end{smallmatrix}$
d4 H10	17	21	26	34	42	53
d5 H11	21	25.5	32	40	50	63
d6	19	23	29	37	46	58
d10 max.	26	34	42	53	67	85
d11 $\begin{smallmatrix} 0 \\ -0.01 \end{smallmatrix}$	26.5	34.8	43	55	70	92
d12 $\begin{smallmatrix} 0 \\ -0.01 \end{smallmatrix}$	37	45	59.3	72.3	88.8	109.75
d13	4		7			
f1 $\begin{smallmatrix} 0 \\ -0.01 \end{smallmatrix}$	20			26		29
f2 min.	35			42		45
f3 $\pm 0.01$	16			18		20
f4 $\begin{smallmatrix} +0.15 \\ 0 \end{smallmatrix}$	2		3.75			
h1 $\begin{smallmatrix} 0 \\ -0.2 \end{smallmatrix}$	13	17	21	26.5	34	44
h2 $\begin{smallmatrix} 0 \\ -0.13 \end{smallmatrix}$	9.5	12	15.5	20	25	31.5
l1 $\begin{smallmatrix} 0 \\ -0.2 \end{smallmatrix}$	16	20	25	32	40	50
l2	3.2	4	5	6.3	8	10
l4 $\begin{smallmatrix} +0.2 \\ 0 \end{smallmatrix}$	5	6	7.5	10	12	15
l5 $\begin{smallmatrix} +0.2 \\ 0 \end{smallmatrix}$	3	3.5	4.5	6	8	10
l6 JS10	8.92	11.42	14.13	18.13	22.85	28.56
l7 $\begin{smallmatrix} 0 \\ -0.1 \end{smallmatrix}$	8		10	10	12.5	12.5
l13	12		19	21	22	24

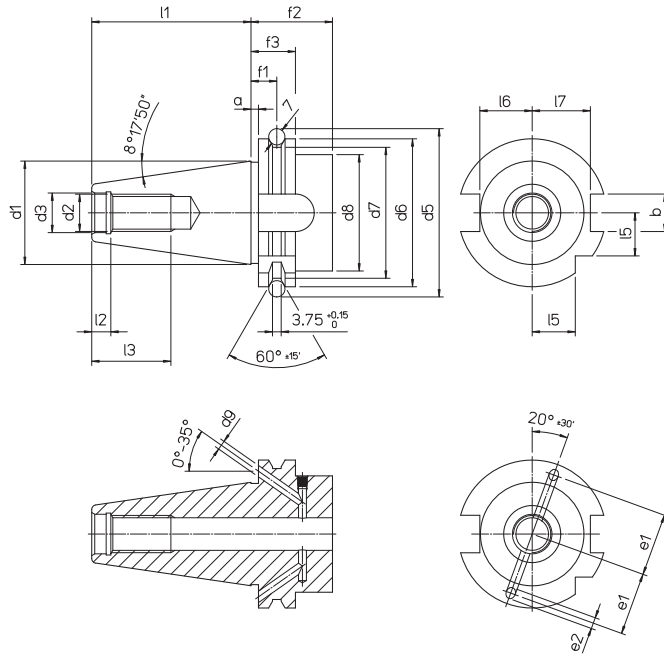
## HSK-T

HSK-T	32	40	50	63	80	100
b1 $\begin{smallmatrix} +0.04 \\ -0.04 \end{smallmatrix}$	7.05	8.05	10.54	12.54	16.04	20.02
b5 $\begin{smallmatrix} +0.03 \\ 0 \end{smallmatrix}$	6.932	7.932	10.425	12.425	15.93	19.91
				$\begin{smallmatrix} +0.035 \\ 0 \end{smallmatrix}$		



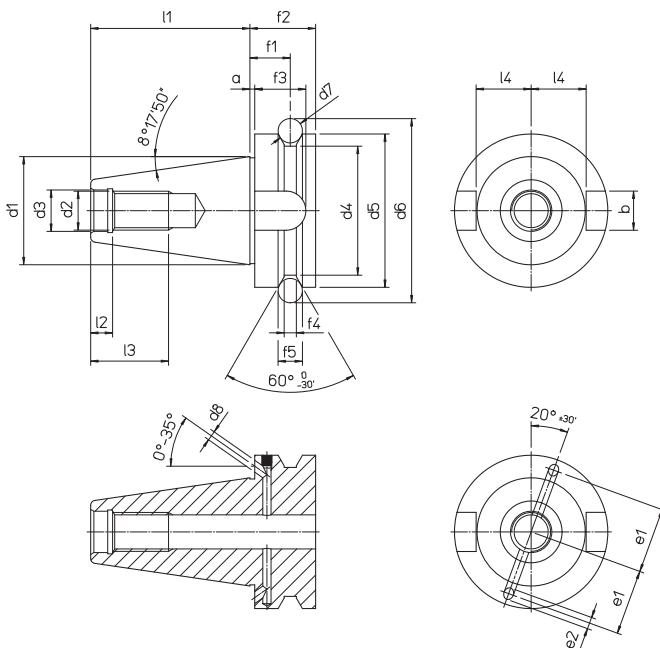
- ARBORS STANDARDS
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## DIN 69871 A-B



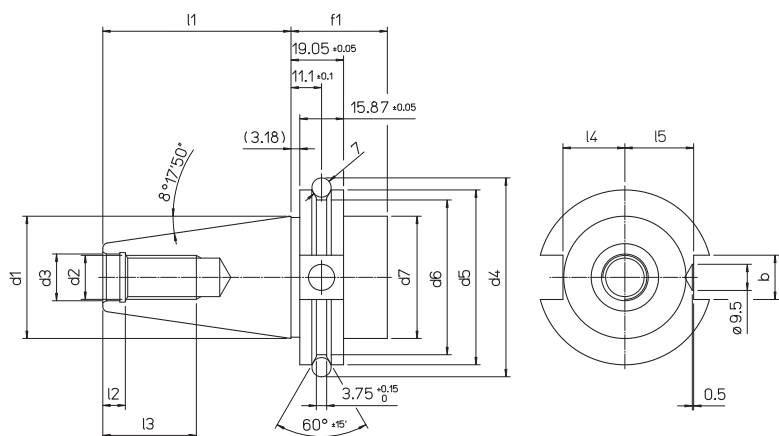
ISO	30	40	45	50	60
a ±0.01	3.2				
b H12	16.1		19.3	25.7	
d1	31.75	44.45	57.15	69.85	107.95
d2	M12	M16	M20	M24	M30
d3 H7	13	17	21	25	32
d5 ±0.05	59.3	72.3	91.35	107.25	164.75
d6 $\begin{smallmatrix} 0 \\ -0.1 \end{smallmatrix}$	50	63.55	82.55	97.50	155
d7 $\begin{smallmatrix} 0 \\ -0.5 \end{smallmatrix}$	44.3	56.25	75.25	91.25	147.70
d8 max.	45	50	63	80	130
d9	4		5	6	8
e1 ±0.1	21	27	35	42	66
e2 max.	5		6	7	9.2
f1 ±0.1	11.1				
f2 min.	35				38
f3 $\begin{smallmatrix} 0 \\ -0.1 \end{smallmatrix}$	19.1				
l1 $\begin{smallmatrix} 0 \\ -0.3 \end{smallmatrix}$	47.8	68.4	82.7	101.75	161.80
l2 $\begin{smallmatrix} +0.5 \\ 0 \end{smallmatrix}$	5.5	8.2	10	11.5	14
l3 min.	24	32	40	47	59
l5 $\begin{smallmatrix} 0 \\ -0.3 \end{smallmatrix}$	15	18.5	24	30	49
l6 $\begin{smallmatrix} 0 \\ -0.4 \end{smallmatrix}$	16.4	22.8	29.1	35.5	54.5
l7 $\begin{smallmatrix} 0 \\ -0.4 \end{smallmatrix}$	19	25	31.3	37.7	59.3

## MAS 403 BT A-B



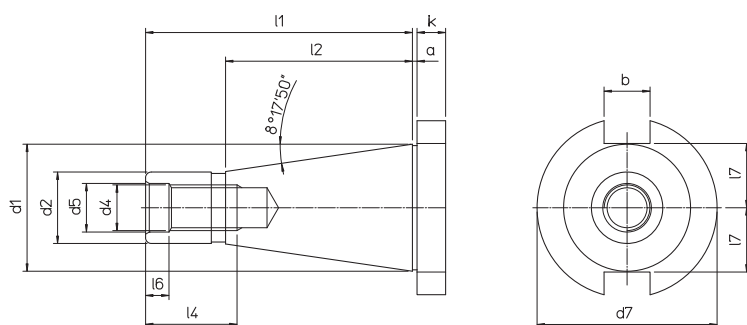
- ARBORS STANDARDS
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## ANSI/CAT

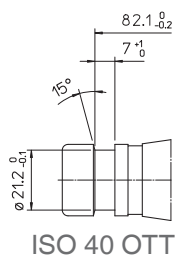


ISO	ANSI/CAT		
	40	45	50
b $^{+0.2}_0$	16.1	19.3	25.7
d1	44.45	57.15	69.85
d2	M 16	M 20	M 24
d3 H7	17	21	25
d4 $\pm 0.05$	72.3	91.35	107.25
d5 $^0_{-0.1}$	63.55	82.55	98.45
d6 $^0_{-0.5}$	56.25	75.25	91.25
d7 $\pm 0.25$	44.45	57.15	69.85
f1 $\pm 0.25$	35		36.5
l1 $^0_{-0.3}$	68.4	82.7	101.75
l2 $^{+0.5}_0$	4.75	5.25	5.75
l3 min.	30	38	45
l4 $^0_{-0.4}$	22.8	29.10	35.50
l5 $^0_{-0.4}$	25	31.3	37.7

## DIN 2080

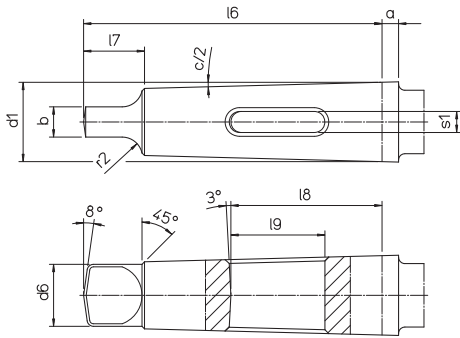


ISO	DIN 2080			
	30	40	45	50
a $\pm 0.2$	1.6		3.2	
b H12	16.1		19.3	25.7
d1	31.75	44.45	57.15	69.85
d2 a10	17.4	25.3	32.4	39.6
d4 $\pm 0.05$	M 12	M 16	M 20	M 24
d5	13	17	21	26
d7 $^0_{-0.4}$	50	63	80	97.5
k $\pm 0.15$	8	10	12	12
l1	68.4	93.4	106.8	126.8
l2	48.4	65.4	82.8	101.8
l4	24	32	40	47
l6 $^{+0.5}_0$	5.5	8.2	10	11.5
l7 max.	16.2	22.5	29	35.3



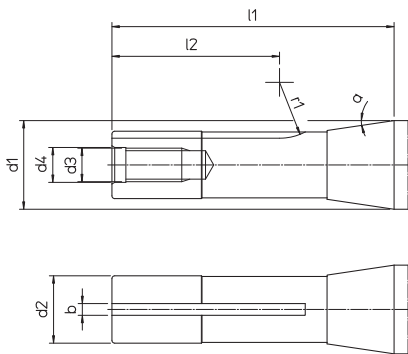
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## DIN 228/B DIN 1806



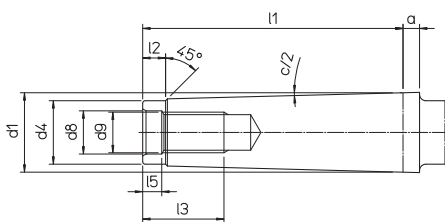
MORSE	4	5
a	6.5	
b H13	11.9	15.9
c/2	1°29'15"	1°30'26"
d1	31.267	44.399
d6 max.	24.5	35.7
l6 $\begin{smallmatrix} 0 \\ -1 \end{smallmatrix}$	117.5	149.5
l7 max.	24	29
l8	59.5	64
l9	37	42
r2	8	10
s1	8.3	12.4

## R8



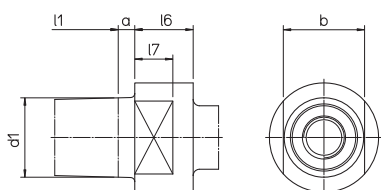
R8	
a	8°25'30"
b ±0.1	4.2
d1	31.750
d2	24.109
d3 $\begin{smallmatrix} -0.007 \\ -0.020 \end{smallmatrix}$	M 12
d4	12.5
l1	101
l2 min.	60
r1	20

## DIN 228/A

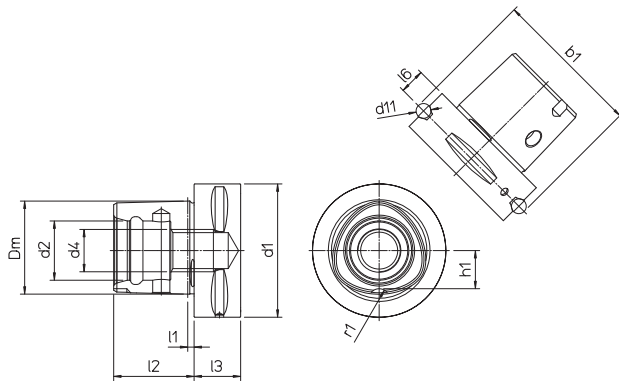


MORSE	4	4 SIP
a	6.5	
b d9	32	
c/2	1°29'15"	
d1	31.267	
d4 max.	25	
d8	17	
d9	M 16	M 14
l1 max.	102.5	
l2	9	
l3	32	
l5 $\begin{smallmatrix} +0.5 \\ 0 \end{smallmatrix}$	8.2	
l6	15	
l7	23	

## DIN 2207

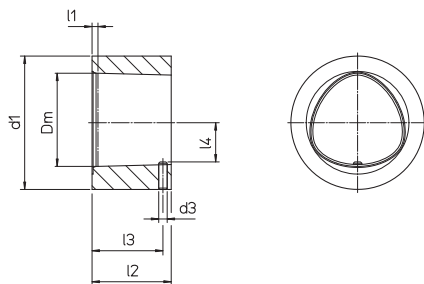


ISO 26623-1



PSC	32	40	50	63	80	100
b1 ±0.1	39	46	59.3	70.7	86	110
Dm	22	28	35	44	55	72
d1 ±0.1	32	40	50	63	80	100
d2 <sup>+0.1</sup> / <sub>-0.05</sub>	15	18	21	28	32	43
d4	M12x1.5	M14x1.5	M16x1.5	M20x2		M24x2
d11	5		7			10
l1	2.5		3			
l2 ±0.1	19	24	30	38	48	60
l3 min	15	20		22	30	36
l6 ±0.15	6	8	10	12		16
h1 ±0.1	9	11	14	18	22.2	29
r1 <sup>+2</sup> / <sub>0</sub>	3	3	4	5	6	8

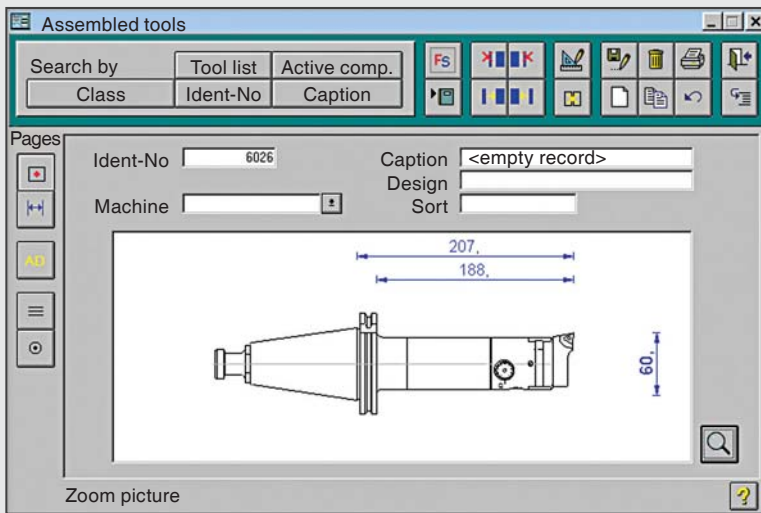
ISO 26623-2



PSC	32	40	50	63	80	100
Dm	22	28	35	44	55	72
d1 min	32	40	50	63	80	100
d3	2	2.5	3	4	5	6
l1	2.3	2.3	2.8	2.8	2.8	2.8
l2 F 0.1	18.4	23.4	29.4	37.4	47.4	59.4
l3 F 0.2	16.5	21	26	33.5	43	52.5
l4	9.4 ±0.1	11.5 ±0.2	14.5 ±0.2	18.5 ±0.2	22.8 ±0.2	29.6



- B** It allows to be graphically constructed in a short period of time, showing the complete composition of the Modulhard'Andrea tools, including dimensions, weight and the list of components.
- D** Der Grafikgenerator ermöglicht in kurzer Zeit das Zusammenstellen kompletter Werkzeuge mit MODULHARD'ANDREA-Elementen, indem er die Abmessungen, das Gewicht und die Liste der Bauteile angibt.
- E** Generador gráfico que permite componer en breve tiempo herramientas completas con elementos del MODULHARD'ANDREA, indicando las dimensiones, el peso y la lista de los componentes.
- F** Générateur graphique qui permet de composer, en peu de temps, des outils complets avec des éléments du MODULHARD'ANDREA, tout en indiquant les dimensions, le poids et la liste des composants.
- I** Generatore grafico che permette di comporre in breve tempo utensili completi con elementi del MODULHARD'ANDREA, indicando le dimensioni, il peso e la lista dei componenti.



**Tool assembling** 6019

< empty record > Machine:

Diam: 60    Cutting: 0    Radius: 0    Angle: 0

Quant	Description	Design/Article	Weight	Price
1	ISO7380/2-B ANSI B5.50	45° 20.143.025.1501	0,000	0,00
1	DIN 69871 A-D 50 MHC90	41.6.50.01.050.20	2,700	0,00
1	PR 50 80	MHC90 65.69.050.0080.0	1,100	0,00
1	TRM 50/50	D 2.5-84 45.50.050.0050.0	1,000	0,00
1	SFTP 50	TPGX 1103 . L 47.050.05.50.001	0,080	0,00
			<b>4,880</b>	<b>0,00</b>

**WinTool** 15.08.2015

