



# MICRO<sup>®</sup>

H E R R A M I E N T A S



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**MICRO HERRAMIENTAS,** es una marca de brocas para Router, comprometida en brindar productos de alta calidad a precios competitivos, garantizandolos por cualquier defecto de fabricación.



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**Aile No. 7 Col. Rincón Verde.  
Naucalpan, EdoMéx.  
C.P.53219.**



**Micro Herramientas**

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**Nuestros Servicios:**

- \* Afilado, reparación y Cambios de pastillas en herramientas de corte.
- \* Fabricación de brocas especiales sobre medida.
- \* Asesoría telefónica y presencial.

# BROCAS Y CUCHILLAS PARA ROUTER

EN ACERO Y CARBURO DE TUNGSTENO

## No. CATALOGO mm A Pul. mm B Pul. CORTADOR DE UN FILO

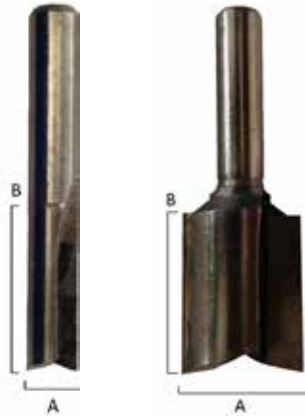
A-011	1.6	1/16	4.0	5/32
A-012	2.4	3/32	4.8	3/16
A-013	3.2	1/8	12.7	1/2
A-014	4.8	3/16	19.0	3/4
A-015	6.4	1/4	22.2	7/8

VASTAGO DE 6.4mm (1/4)



## CORTADOR DE DOS FILOS

## No. CATALOGO mm A Pul. mm B Pul.



VASTAGO DE 6.4mm (1/4)

VASTAGO DE 1/2

A-101	3.2	1/8	8.0	5/16
A-102	4.8	3/16	11.1	7/16
A-103	6.4	1/4	19.0	3/4
A-103-1	5.5	7/32	19.0	3/4
A-104	6.4	1/4	25.4	1"
A-105	8.0	5/16	19.0	3/4
A-105-1	8.0	5/16	22.2	7/8
A-106	9.5	3/8	19.0	3/4
A-107	9.5	3/8	25.4	1"
A-108	11.1	7/16	19.0	3/4
A-109	12.7	1/2	19.0	3/4
A-110	15.9	5/8	19.0	3/4
A-111	19.0	3/4	19.0	3/4
A-112	22.2	7/8	19.0	3/4
A-113	25.4	1"	19.0	3/4
A-113-1	25.4	1"	19.0	3/4

## CORDON SENCILLO No. CATALOGO mm A Pul. mm B Pul.



DM-201	15.9	5/8	16.3	41/64
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VASTAGO DE 6.4mm (1/4)

## CORDON DOBLE No. CATALOGO mm A Pul. mm B Pul.



DM-202	15.9	5/8	22.6	57/64
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VASTAGO DE 6.4mm (1/4)

## CHINKULTIC No. CATALOGO mm A Pul. mm B Pul.



DM-203	19.0	3/4	19.0	3/4
DM-204	28.5	1"1/8	20.2	51/64

VASTAGO DE 6.4mm (1/4)

## BOLON No. CATALOGO mm A Pul. mm B Pul.



DM-205	22.2	7/8	20.2	51/64
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VASTAGO DE 6.4mm (1/4)

## MITONTIC No. CATALOGO mm A Pul. mm B Pul.



DM-206	22.2	7/8	14.2	9/16
DM-207	25.4	1"	19.0	3/4
DM-208	28.5	1"1/8	20.2	51/64

VASTAGO DE 6.4mm (1/4)

## PAKAL No. CATALOGO mm A Pul. mm B Pul.

DM-209	25.4	1"	19.0	3/4
DM-210	28.5	1"1/8	20.2	51/64





VASTAGO DE 6.4mm (1/4)

# BROCAS Y CUCHILLAS PARA ROUTER


EN ACERO Y CARBURO DE TUNGSTENO

JOIGEL	No. CATALOGO	mm A	Pul.	mm B	Pul.
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	DM-211	28.5	1"1/8	20.2	51/64
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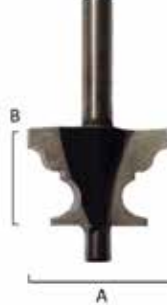
**VASTAGO DE 6.4mm (1/4)**

MITZITON	No. CATALOGO	mm A	Pul.	mm B	Pul.
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	DM-213	28.5	1"1/8	20.2	51/64
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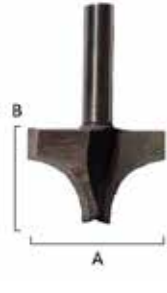
**VASTAGO DE 6.4mm (1/4)**

CHUCUMALTIC	No. CATALOGO	mm A	Pul.	mm B	Pul.
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	DM-215	28.5	1"1/8	20.2	51/64
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**VASTAGO DE 6.4mm (1/4)**

CANCUC	No. CATALOGO	mm A	Pul.	mm B	Pul.
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	DM-218	25.4	1"	17.4	11/16
	DM-219	28.5	1"1/8	20.2	51/64


**VASTAGO DE 6.4mm (1/4)**

CHILIL	No. CATALOGO	mm A	Pul.	mm B	Pul.
--------	--------------	------	------	------	------

	DM-222	22.2	7/8	14.2	9/16
	DM-223	28.5	1"1/8	20.2	51/64


**VASTAGO DE 6.4mm (1/4)**

BACHAJON	No. CATALOGO	mm A	Pul.	mm B	Pul.
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	DM-212	28.5	1"1/8	20.2	51/64
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**VASTAGO DE 6.4mm (1/4)**

CHANAL	No. CATALOGO	mm A	Pul.	mm B	Pul.
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	DM-214	28.5	1"1/8	20.2	51/64
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**VASTAGO DE 6.4mm (1/4)**

NACHIG	No. CATALOGO	mm A	Pul.	mm B	Pul.
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	DM-216	25.4	1"	19.0	3/4
	DM-217	28.5	1"1/8	20.2	51/64


**VASTAGO DE 6.4mm (1/4)**

OXCHUC	No. CATALOGO	mm A	Pul.	mm B	Pul.
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	DM-220	19.0	3/4	12.7	1/2
	DM-221	25.4	1"	17.4	11/16

**VASTAGO DE 6.4mm (1/4)**

CHILON	No. CATALOGO	mm A	Pul.	mm B	Pul.
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	DM-224	22.2	7/8	15.9	5/8
	DM-225	28.5	1"1/8	19.0	3/4

**VASTAGO DE 6.4mm (1/4)**


# BROCAS Y CUCHILLAS PARA ROUTER

EN ACERO Y CARBURO DE TUNGSTENO


TULIJA	No. CATALOGO	mm A	Pul.	mm B	Pul.
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	DM-226	22.2	7/8	17.4	11/16
	DM-227	28.5	1"1/8	20.2	51/64

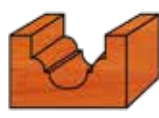
**VASTAGO DE 6.4mm (1/4)**




NUTUTUN	No. CATALOGO	mm A	Pul.	mm B	Pul.
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	DM-228	22.2	7/8	14.2	9/16
	DM-229	28.5	1"1/8	19.0	3/4

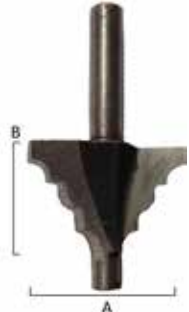
**VASTAGO DE 6.4mm (1/4)**





No. CATALOGO	mm	A	Pul.	mm B	Pul.	DIAMANTINA
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DM-301	19.0	3/4	14.2	9/16		
DM-302	22.2	7/8	15.9	5/8		
DM-303	25.4	1"	19.0	3/4		
DM-304	28.5	1"1/8	20.6	13/16		

**VASTAGO DE 6.4mm (1/4)**




TOLEDO						No. CATALOGO	mm	A	Pul.	mm B	Pul.
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	DM-305	19.0	3/4	14.2	9/16	
	DM-306	22.2	7/8	15.9	5/8	
	DM-307	25.4	1"	19.0	3/4	
	DM-308	28.5	1"1/8	20.2	51/64	

**VASTAGO DE 6.4mm (1/4)**


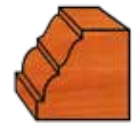
No. CATALOGO	mm	A	Pul.	mm B	Pul.	JOVEL
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DM-309	19.0	3/4	14.2	9/16		
DM-310	22.2	7/8	18.2	23/32		
DM-311	25.4	1"	19.0	3/4		
DM-312	28.5	1"1/8	20.2	51/64		

**VASTAGO DE 6.4mm (1/4)**




AUSTRIACA						No. CATALOGO	mm	A	Pul.	mm B	Pul.
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	DM-313	19.0	3/4	14.2	9/16	
	DM-314	22.2	7/8	15.9	5/8	
	DM-315	25.4	1"	19.0	3/4	
	DM-316	28.5	1"1/8	20.2	51/64	

**VASTAGO DE 6.4mm (1/4)**

No. CATALOGO	mm	A	Pul.	mm B	Pul.	POLINESIA
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DM-317	19.0	3/4	14.2	9/16		
DM-318	22.2	7/8	15.9	5/8		
DM-319	25.4	1"	19.0	3/4		
DM-320	28.5	1"1/8	20.2	51/64		

**VASTAGO DE 6.4mm (1/4)**





## ALEJANDRINA

No. CATALOGO	mm	A	Pul.	mm	B	Pul.
DM-321	19.0	3/4		14.2	9/16	
DM-322	22.2	7/8		15.9	5/8	
DM-323	25.4	1"		19.0	3/4	
DM-324	28.5	1 1/8"		20.2	51/64	

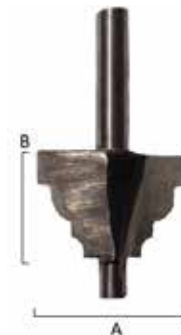


VASTAGO DE  
6.4mm (1/4)

No. CATALOGO	mm	A	Pul.	mm	B	Pul.	ESPAÑOLA
DM-325	19.0	3/4		12.7	1/2		
DM-326	22.2	7/8		15.9	5/8		
DM-327	25.4	1"		19.0	3/4		
DM-328	28.5	1 1/8"		20.6	13/16		



VASTAGO DE  
6.4mm (1/4)



## ZAFIRO

No. CATALOGO	mm	A	Pul.	mm	B	Pul.
DM-329	19.0	3/4		14.2	9/16	
DM-330	22.2	7/8		15.9	5/8	
DM-331	25.4	1"		19.0	3/4	
DM-332	28.5	1 1/8"		20.2	51/64	



VASTAGO DE  
6.4mm (1/4)

No. CATALOGO	mm	A	Pul.	mm	B	Pul.	KLIPERTON
DM-333	19.0	3/4		14.2	9/16		
DM-334	22.2	7/8		15.9	5/8		
DM-335	25.4	1"		19.0	3/4		
DM-336	28.5	1 1/8"		20.2	51/64		



VASTAGO DE  
6.4mm (1/4)



## TURQUESA

No. CATALOGO	mm	A	Pul.	mm	B	Pul.
DM-337	19.0	3/4		14.2	9/16	
DM-338	22.2	7/8		16.6	21/32	
DM-339	25.4	1"		19.0	3/4	
DM-340	28.5	1 1/8"		20.2	51/64	



VASTAGO DE  
6.4mm (1/4)

No. CATALOGO	mm	A	Pul.	mm	B	Pul.	TOLENTINA
DM-341	19.0	3/4		14.2	9/16		
DM-342	22.2	7/8		17.4	11/16		
DM-343	25.4	1"		19.0	3/4		
DM-344	28.5	1 1/8"		20.2	51/64		



VASTAGO DE  
6.4mm (1/4)





## CORTADOR CURVO



VASTAGO DE  
6.4mm (1/4)

No. CATALOGO	mm	A	Pul.	mm B	Pul.
DM-401	12.7		1/2	9.5	3/8
DM-402	15.9		5/8	11.1	7/16
DM-403	22.2		7/8	12.7	1/2
DM-404	28.5		1"1/8	15.9	5/8

No. CATALOGO	mm	A	Pul.	mm B	Pul.	MEDIA CAÑA
DM-405	6.4		1/4	6.4	1/4	
DM-406	9.5		3/8	8.0	5/16	
DM-407	12.7		1/2	9.5	3/8	
DM-408	15.9		5/8	9.5	3/8	
DM-409	19.0		3/4	12.7	1/2	
DM-409-1	22.2		7/8	15.9	5/8	
DM-409-2	25.4		1"	15.9	5/8	
DM-409-3	28.5		1"1/8	17.4	11/16	
DM-409-4	38.1		1"1/2	22.2	7/8	



VASTAGO DE  
6.4mm (1/4)



## CHAFLAN



VASTAGO DE  
6.4mm (1/4)

VASTAGO DE 1/2

No. CATALOGO	mm	A	Pul.	mm B	Pul.
DM-410	22.2		7/8	14.2	9/16
DM-410-1	25.4		1"	15.9	5/8
DM-410-2	28.5		1"1/8	17.4	11/16
DM-410-3	28.5		1"1/8	17.4	11/16
DM-410-4	38.1		1"1/2	23.0	29/32

No. CATALOGO	mm	A	Pul.	mm B	Pul.	CORTE EN "V"
DM-411	12.7		1/2	9.5	3/8	
DM-411-1	15.9		5/8	11.1	7/16	
DM-411-2	19.0		3/4	13.5	17/32	
DM-411-3	22.2		7/8	15.9	5/8	
DM-411-4	25.4		1"	17.4	11/16	
DM-412	28.5		1"1/8	20.2	51/64	
DM-412-1	38.1		1"1/2	25.0	63/64	
DM-412-3	30.0		1"30/16	20.2	51/64	VASTAGO DE 1/2
DM-412-4	28.5		1"1/8	20.2	51/64	VASTAGO DE 1/2



VASTAGO DE  
6.4mm (1/4)



## CORTADOR DE MOLDURA



VASTAGO DE  
6.4mm (1/4)

No. CATALOGO	mm	A	Pul.	mm B	Pul.
DM-413	12.7		1/2	9.1	23/64
DM-413-1	15.9		5/8	11.1	7/16
DM-414	19.0		3/4	14.2	9/16
DM-414-1	22.2		7/8	14.2	9/16
DM-414-2	25.4		1"	15.9	5/8
DM-415	28.5		1"1/8	15.9	5/8

No. CATALOGO	mm	A	Pul.	mm B	Pul.	REDONDEADOR
DM-416	15.9		5/8	11.1	7/16	
DM-416-1	19.0		3/4	12.7	1/2	
DM-417	22.2		7/8	14.2	9/16	
DM-417-1	25.4		1"	15.9	5/8	
DM-418	28.5		1"1/8	19.0	3/4	
DM-418-1	38.1		1"1/2	25.4	1"	
DM-418-2	31.7		1"1/4	19.5	49/64	
DM-418-3	38.1		1"1/2	24.5	31/32	VASTAGO DE 1/2
DM-418-5	50.8		2"	29.0	1"9/64	VASTAGO DE 1/2



VASTAGO DE  
6.4mm (1/4)



## ROMANA



VASTAGO DE  
6.4mm (1/4)

No. CATALOGO	mm	A	Pul.	mm B	Pul.
DM-419	22.2		7/8	15.9	5/8
DM-420	28.5		1"1/8	20.2	51/64
DM-420-1	38.1		1"1/2	25.4	1"

No. CATALOGO	mm	A	Pul.	mm B	Pul.	COLA DE PATO
DM-421	8.0		5/16	9.5	3/8	
DM-422	12.7		1/2	15.9	5/8	
DM-422-1	15.9		5/8	15.9	5/8	



VASTAGO DE  
6.4mm (1/4)



## CORTADOR DE ENSAMBLE



VASTAGO DE  
6.4mm (1/4)

VASTAGO DE 1/2

No. CATALOGO	mm	A	Pul.	mm B	Pul.
DM-423	15.9		5/8	9.5	3/8
DM-423-1	19.0		3/4	12.7	1/2
DM-424	22.2		7/8	15.9	5/8
DM-424-1	25.4		1"	19.0	3/4
DM-424-2	28.5		1"1/8	20.2	51/64
DM-424-3	38.1		1"1/2	25.4	1"
DM-424-4	38.1		1"1/2	25.4	1"

No. CATALOGO	mm	A	Pul.	mm B	Pul.	CORTADOR DE VENAS
DM-425	1.6		1/16	4.8	3/16	
DM-426	3.2		1/8	8.0	5/16	
DM-427	4.8		3/16	11.1	7/16	



VASTAGO DE  
6.4mm (1/4)



## PECHO PALOMA



VASTAGO DE  
6.4mm (1/4)

VASTAGO DE 1/2

No. CATALOGO	mm	A	Pul.	mm B	Pul.
DM-428	12.7		1/2	9.5	3/8
DM-429	15.9		5/8	10.5	13/32
DM-430	19.0		3/4	13.5	17/32
DM-431	22.2		7/8	14.2	9/16
DM-432	28.5		1"1/8	19.0	3/4
DM-432-1	38.1		1"1/2	25.0	63/64

No. CATALOGO	mm	A	Pul.	mm B	Pul.	PECHO PALOMA C/GUIA
DM-433	15.9		5/8	10.5	13/32	
DM-434	19.0		3/4	13.5	17/32	
DM-435	22.2		7/8	14.2	9/16	
DM-436	28.5		1"1/8	19.0	3/4	
DM-436-1	38.1		1"1/2	25.0	63/64	

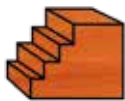
VASTAGO DE  
6.4mm (1/4)







## ESCALON



VASTAGO DE  
6.4mm (1/4)

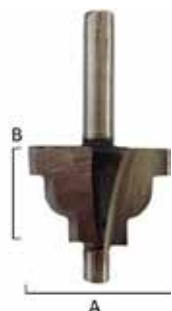
No. CATALOGO	mm	A	Pul.	mm B	Pul.
DM-437	15.9		5/8	9.9	25/64
DM-438	19.0		3/4	11.9	15/32
DM-439	22.2		7/8	15.0	19/32
DM-440	28.5		1"1/8	16.6	21/32

No. CATALOGO	mm	A	Pul.	mm B	Pul.
DM-441	22.2		7/8	14.2	9/16
DM-441-1	25.4		1"	15.9	5/8
DM-442	28.5		1"1/8	19.0	3/4

## SERVER



VASTAGO DE  
6.4mm (1/4)



## NOVA



VASTAGO DE  
6.4mm (1/4)

No. CATALOGO	mm	A	Pul.	mm B	Pul.
DM-443	22.2		7/8	13.5	17/32
DM-443-1	25.4		1"	15.9	5/8
DM-444	28.5		1"1/8	19.0	3/4

No. CATALOGO	mm	A	Pul.	mm B	Pul.
DM-444-1	19.0		3/4	13.5	17/32
DM-445	22.2		7/8	14.2	9/16
DM-446	25.4		1"	15.9	5/8
DM-447	28.5		1"1/8	17.4	11/16

## GENOVA



VASTAGO DE  
6.4mm (1/4)



## GRECA



VASTAGO DE  
6.4mm (1/4)

No. CATALOGO	mm	A	Pul.	mm B	Pul.
DM-447-1	19.0		3/4	13.5	17/32
DM-448	22.2		7/8	15.0	19/32
DM-449	25.4		1"	15.9	5/8
DM-450	28.5		1"1/8	17.4	11/16

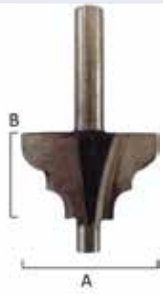
No. CATALOGO	mm	A	Pul.	mm B	Pul.
DM-451	15.9		5/8	13.5	17/32
DM-451-1	19.0		3/4	14.2	9/16
DM-452	22.2		7/8	15.9	5/8
DM-453	28.5		1"1/8	17.4	11/16

## CLASICA



VASTAGO DE  
6.4mm (1/4)





## VENECIA

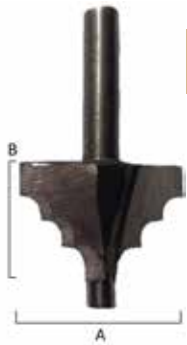
No. CATALOGO	mm	A	Pul.	mm B	Pul.
DM-453-1	19.0		3/4	13.5	17/32
DM-454	22.2		7/8	14.2	9/16
DM-455	25.4		1"	15.9	5/8
DM-456	28.5		1"1/8	17.4	11/16



VASTAGO DE  
6.4mm (1/4)

No. CATALOGO	mm	A	Pul.	mm B	Pul.	PROVENZAL
DM-456-1	19.0		3/4	13.5	17/32	
DM-457	22.2		7/8	14.2	9/16	
DM-458	25.4		1"	15.9	5/8	
DM-459	28.5		1"1/8	17.4	11/16	

VASTAGO DE  
6.4mm (1/4)



## MURCIELAGO

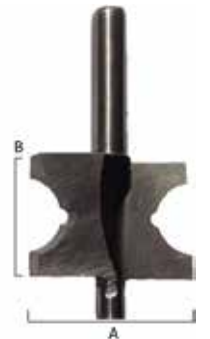
No. CATALOGO	mm	A	Pul.	mm B	Pul.
DM-459-1	19.0		3/4	12.7	1/2
DM-460	22.2		7/8	13.5	17/32
DM-461	25.4		1"	17.0	43/64
DM-462	28.5		1"1/8	19.0	3/4



VASTAGO DE  
6.4mm (1/4)

No. CATALOGO	mm	A	Pul.	mm B	Pul.	CARITA
DM-462-1	19.0		3/4	15.0	19/32	
DM-463	22.2		7/8	15.9	5/8	
DM-464	25.4		1"	17.4	11/16	
DM-465	28.5		1"1/8	19.0	3/4	

VASTAGO DE  
6.4mm (1/4)



## ANTIGUA

No. CATALOGO	mm	A	Pul.	mm B	Pul.
DM-465-1	19.0		3/4	13.5	17/32
DM-466	22.2		7/8	16.6	21/32
DM-467	25.4		1"	17.4	11/16
DM-468	28.5		1"1/8	19.0	3/4



VASTAGO DE  
6.4mm (1/4)

No. CATALOGO	mm	A	Pul.	mm B	Pul.	GLOBO
DM-468-1	19.0		3/4	15.9	5/8	
DM-469	22.2		7/8	17.4	11/16	
DM-470	25.4		1"	20.2	51/64	
DM-471	28.5		1"1/8	22.2	7/8	

VASTAGO DE  
6.4mm (1/4)





## MEDIA LUNA

No. CATALOGO	mm	A	Pul.	mm	B	Pul.
DM-471-1	19.0		3/4	15.9		5/8
DM-472	22.2		7/8	17.4		11/16
DM-473	25.4		1"	19.0		3/4
DM-474	28.5		1"1/8	20.2		51/64



VASTAGO DE  
6.4mm (1/4)

No. CATALOGO	mm	A	Pul.	mm	B	Pul.
DM-475	15.9		5/8	15.9		5/8
DM-476	19.0		3/4	19.0		3/4
M-475-5	31.7		1"1/4	6.4		1/4

## JUEGO MACHIMBRADOR

VASTAGO DE  
6.4mm (1/4)



## AVELLANADOR

No. CATALOGO	mm	A	Pul.	mm	B	Pul.
DM-477	6.4		1/4	9.5		3/8
DM-478	9.5		3/8	12.7		1/2
DM-479	12.7		1/2	17.0		43/64
DM-480	15.9		5/8	17.0		43/64
DM-481	19.0		3/4	21.0		53/64

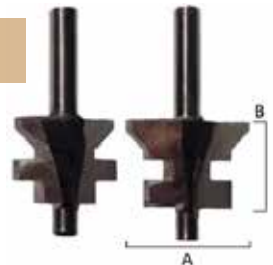


VASTAGO DE  
6.4mm (1/4)

No. CATALOGO	mm	A	Pul.	mm	B	Pul.
DM-482	28.1		1"7/64	20.2		51/64

## JUEGO PARA LAMBRIN

VASTAGO DE  
6.4mm (1/4)



## COLLARIN

No. CATALOGO	mm	A	Pul.	mm	B	Pul.
DM-483	19.0		3/4	15.9		5/8
DM-484	22.2		7/8	17.4		11/16
DM-485	25.4		1"	19.0		3/4
DM-486	28.5		1"1/8	20.2		51/64

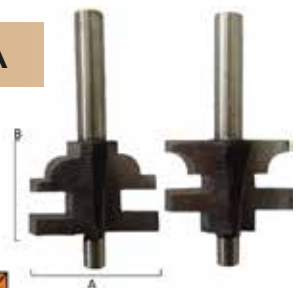


VASTAGO DE  
6.4mm (1/4)

No. CATALOGO	mm	A	Pul.	mm	B	Pul.
DM-487	31.0		1"7/32	20.2		51/64

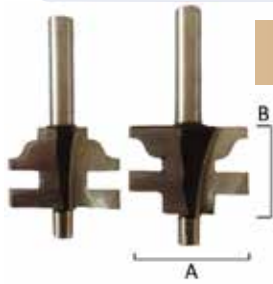
## JGO. DE ENSAMBLE C/MOLDURA

VASTAGO DE  
6.4mm (1/4)



# BROCAS Y CUCHILLAS PARA ROUTER

EN ACERO Y CARBURO DE TUNGSTENO



## JGO. DE ENSAMBLE ROMANO

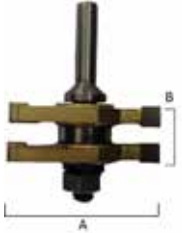
No. CATALOGO	mm	A	Pul.	mm	B	Pul.
DM-488	31.0		1"7/32	20.2		51/64



VASTAGO DE  
6.4mm (1/4)

## MACHIMBRADOR AJUSTABLE

No. CATALOGO	mm	A	Pul.	mm	B	Pul.
HART-489	44.5		1"3/4	9.5		3/8



VASTAGO DE  
6.4mm (1/4)

## ENSAMBLE AJUSTABLE

No. CATALOGO	mm	A	Pul.	mm	B	Pul.
HART-490	44.5		1"3/4	14.2		9/16



VASTAGO DE  
6.4mm (1/4)

## COLA DE PATO EN CARBURO

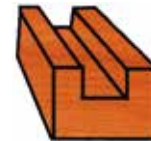
No. CATALOGO	mm	A	Pul.	mm	B	Pul.
HART-500	12.7		1/2	15.9		5/8



VASTAGO DE  
6.4mm (1/4)

## No. CATALOGO    mm    A    Pul.    mm    B    Pul.    RECTAS DE DOS FILOS EN CARBURO

HART-501	6.4		1/4	19.0		3/4
HART-501-2	6.0		15/64	19.0		3/4
HART-501-4	5.0		13/64	19.0		3/4
HART-501-5	5.5		7/32	19.0		3/4
HART-502	6.4		1/4	25.4		1"
HART-503	8.0		5/16	19.0		3/4
HART-504	9.5		3/8	25.4		1"
HART-505	12.7		1/2	19.0		3/4
HART-506	15.9		5/8	19.0		3/4
HART-507	19.0		3/4	19.0		3/4
HART-507-1	19.0		3/4	25.4		1"
HART-512	22.2		7/8	19.0		3/4
HART-513	25.4		1"	19.0		3/4



VASTAGO DE  
6.4mm (1/4)



## RECTAS EN CARBURO DE 22°

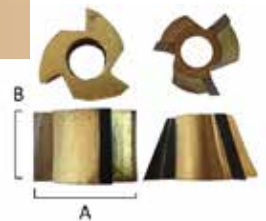
No. CATALOGO	mm	A	Pul.	mm	B	Pul.
1 Filo HART-508	6.4		1/4	12.7		1/2
2 Filos HART-509	12.7		1/2	12.7		1/2



VASTAGO DE  
6.4mm (1/4)

## No. CATALOGO    mm    A    Pul.    mm    B    Pul.    FRESAS DE 3 FILOS

HART-510	15.9		5/8	9.9		25/64	
HART-511	22.2		7/8	9.9		25/64	Derecha
HART-511-1	22.2		7/8	9.9		25/64	Izquierda



BARRENO DE  
6.4mm (1/4)

### ARBOL CON BALERO



No. CATALOGO	mm A	Pul.	mm B	Pul.	VASTAGO	MODELO
HART-514	6.4	1/4	31.7	1"1/4	1/4	489,510 y 511
HART-514-1	6.4	1/4	24.2	61/64	1/4	516,517 y 517-1
HART-514-2	8.0	5/16	31.7	1"1/4	1/4	490
HART-514-3	8.0	5/16	31.7	1"1/4	1/2	490
HART-514-4	6.4	1/4	31.7	1"1/4	1/2	489,510 y 511

### No. CATALOGO

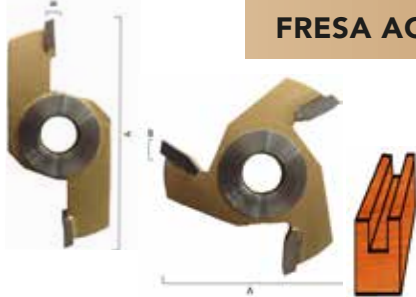
mm A Pul. mm B Pul. VASTAGO FILOS

### BROCA PARA FORMAICA

HART-501-1	6.4	1/4	19.0	3/4	1/4	2
HART-501-3	6.4	1/4	19.0	3/4	1/4	2
HART-502-1	6.4	1/4	25.4	1"	1/4	2
HART-515	12.7	1/2	15.9	5/8	1/4	2
HART-515-1	12.7	1/2	25.4	1"	1/4	2
HART-515-1-2	12.7	1/2	19.0	3/4	1/4	2
HART-515-1-3	12.7	1/2	25.4	1"	1/4	2
HART-515-2	12.7	1/2	31.7	1"1/4	1/4	2
HART-515-3	12.7	1/2	15.9	5/8	1/2	2
HART-515-4	12.7	1/2	25.4	1"	1/2	2
HART-515-5	12.7	1/2	31.7	1"1/4	1/2	2
HART-515-6	12.7	1/2	50.8	2"	1/2	2
HART-515-7	9.5	3/8	25.4	1"	1/2	2
HART-515-8	9.5	3/8	31.7	1"1/4	1/2	2
HART-515-9	9.5	3/8	50.8	2"	1/2	2
HART-515-10	12.7	1/2	25.4	1"	1/2	3
HART-515-11	12.7	1/2	31.7	1"1/4	1/2	3
HART-515-12	12.7	1/2	50.8	2"	1/2	3
HART-515-14	12.7	1/2	38.1	1"1/2	1/2	2
HART-515-15	12.7	1/2	63.5	2"1/2	1/2	2



### FRESA ACANALADORA



No. CATALOGO	mm A	Pul.	mm B	Pul.	FILOS
HART-516	3.2	1/8	50.8	2"	2
HART-517	4.8	3/16	50.8	2"	3
HART-517-1	6.4	1/4	50.8	2"	3

BARRENO DE 6.4mm (1/4)

### CURVO C/BALERO

No. CATALOGO	mm A	Pul.	mm B	Pul.
HART-601	25.4	1"	15.9	5/8
HART-602	31.7	1"1/4	20.2	51/64



VASTAGO DE 6.4mm (1/4)

### MOLDURA C/BALERO

No. CATALOGO	mm A	Pul.	mm B	Pul.
HART-603	25.4	1"	15.9	5/8
HART-604	31.7	1"1/4	20.2	51/64



VASTAGO DE 6.4mm (1/4)

### No. CATALOGO

mm A Pul. mm B Pul.

### REDONDEADOR CON BALERO

HART-605	25.4	1"	15.9	5/8	VASTAGO DE 6.4mm (1/4)
HART-606	31.7	1"1/4	20.2	51/64	VASTAGO DE 6.4mm (1/4)
HART-606-1	50.8	2"	36.0	1"27/64	VASTAGO DE 12.7mm (1/2)
HART-606-2	63.5	2"1/2	40.0	1"37/64	VASTAGO DE 12.7mm (1/2)
HART-606-3	76.2	3"	47.0	1"27/34	VASTAGO DE 12.7mm (1/2)
HART-606-4	88.9	3"1/2	54.0	2"1/8	VASTAGO DE 12.7mm (1/2)



# BROCAS Y CUCHILLAS PARA ROUTER

EN ACERO Y CARBURO DE TUNGSTENO

ROMANA C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-607	25.4	1"	15.9	5/8
	HART-608	31.7	1"1/4	20.2	51/64



VASTAGO DE 6.4mm (1/4)

ENSAMBLE C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-609	25.4	1"	15.9	5/8
	HART-610	31.7	1"1/4	20.2	51/64



VASTAGO DE 6.4mm (1/4)

SERVER C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-611	25.4	1"	15.9	5/8
	HART-612	31.7	1"1/4	20.2	51/64



VASTAGO DE 6.4mm (1/4)

PECHO PALOMA C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-613	25.4	1"	15.9	5/8
	HART-614	31.7	1"1/4	20.2	51/64



VASTAGO DE 6.4mm (1/4)

ANTIGUA C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-615	25.4	1"	15.9	5/8
	HART-616	31.7	1"1/4	20.2	51/64



VASTAGO DE 6.4mm (1/4)

INDU C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-617	31.7	1"1/4	20.2	51/64



VASTAGO DE 6.4mm (1/4)

PAGODA C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-618	31.7	1"1/4	20.2	51/64



VASTAGO DE 6.4mm (1/4)

CONTEMPORANEA C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-619	31.7	1"1/4	20.2	51/64



VASTAGO DE 6.4mm (1/4)

RENACIMIENTO C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-620	25.4	1"	15.9	5/8
	HART-621	31.7	1"1/4	20.2	51/64



VASTAGO DE 6.4mm (1/4)

HERRERIANA C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-622	31.7	1"1/4	20.2	51/64



VASTAGO DE 6.4mm (1/4)

CHURRIGUESCA C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-623	25.4	1"	20.2	51/64
	HART-624	31.7	1"1/4	20.2	51/64





VASTAGO DE 6.4mm (1/4)

BETA C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-625	25.4	1"	20.2	51/64
	HART-626	31.7	1"1/4	20.2	51/64




VASTAGO DE 6.4mm (1/4)


SAFARI C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-627	25.4	1"	20.2	51/64
	HART-628	31.7	1 1/4"	20.2	51/64


 VASTAGO DE 6.4mm (1/4)


BARROCO C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-629	31.7	1 1/4"	20.2	51/64


 VASTAGO DE 6.4mm (1/4)


VIRREYNAL C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-630	25.4	1"	15.9	5/8
	HART-631	31.7	1 1/4"	20.2	51/64


 VASTAGO DE 6.4mm (1/4)


CHAFLAN C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-632	25.4	1"	15.9	5/8
	HART-633	31.7	1 1/4"	20.2	51/64


 VASTAGO DE 6.4mm (1/4)


ABADESA C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-634	31.7	1 1/4"	20.2	51/64

 VASTAGO DE 6.4mm (1/4)


CURVO CON GUIA	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-635	38.1	1 1/2"	19.0	3/4


 VASTAGO DE 6.4mm (1/4)


CURVO C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-635-1	38.1	1 1/2"	19.0	3/4


 VASTAGO DE 6.4mm (1/4)


REDONDEADOR CON GUIA	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-636	38.1	1 1/2"	25.4	1"

 VASTAGO DE 6.4mm (1/4)

REDONDEADOR C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-636-1	38.1	1 1/2"	25.4	1"

 VASTAGO DE 6.4mm (1/4)

PECHO PALOMA CON GUIA	No. CATALOGO	mm A	Pul.	mm B	Pul.
	HART-637	38.1	1 1/2"	25.4	1"

 VASTAGO DE 6.4mm (1/4)

**PECHO PALOMA C/BALERO** No. CATALOGO mm A Pul. mm B Pul.

HART-637-1 38.1 1"1/2 25.4 1"



VASTAGO DE 6.4mm (1/4)

**ENSAMBLE C/BALERO** No. CATALOGO mm A Pul. mm B Pul.

HART-638-1 38.1 1"1/2 25.4 1"



VASTAGO DE 6.4mm (1/4)

**ROMANA C/BALERO** No. CATALOGO mm A Pul. mm B Pul.

HART-640-1 38.1 1"1/2 25.4 1"



VASTAGO DE 6.4mm (1/4)

**SERVER C/BALERO** No. CATALOGO mm A Pul. mm B Pul.

HART-641-1 38.1 1"1/2 25.4 1"



VASTAGO DE 6.4mm (1/4)

**CLASICA C/BALERO** No. CATALOGO mm A Pul. mm B Pul.

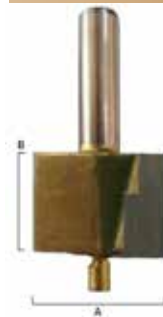
HART-642-1 38.1 1"1/2 25.4 1"



VASTAGO DE 6.4mm (1/4)

**ENSAMBLE CON GUIA** No. CATALOGO mm A Pul. mm B Pul.

HART-638 38.1 1"1/2 25.4 1"



VASTAGO DE 6.4mm (1/4)

**ROMANA CON GUIA** No. CATALOGO mm A Pul. mm B Pul.

HART-640 38.1 1"1/2 25.4 1"



VASTAGO DE 6.4mm (1/4)

**SERVER CON GUIA** No. CATALOGO mm A Pul. mm B Pul.

HART-641 38.1 1"1/2 25.4 1"



VASTAGO DE 6.4mm (1/4)

**CLASICA CON GUIA** No. CATALOGO mm A Pul. mm B Pul.

HART-642 38.1 1"1/2 25.4 1"



VASTAGO DE 6.4mm (1/4)

**MEDIA CAÑA** No. CATALOGO mm A Pul. mm B Pul.

HART-643 38.1 1"1/2 19.0 3/4



VASTAGO DE 6.4mm (1/4)



# BROCAS Y CUCHILLAS PARA ROUTER

EN ACERO Y CARBURO DE TUNGSTENO

VEGA CON GUIA	No. CATALOGO	mm A	Pul.	mm B	Pul.
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HART-644 38.1 1"1/2 25.4 1"



VASTAGO DE  
12.7mm (1/2)

VEGA C/BALERO	No. CATALOGO	mm A	Pul.	mm B	Pul.
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HART-644-1 38.1 1"1/2 25.4 1"



VASTAGO DE  
12.7mm (1/2)

No. CATALOGO	mm	A	Pul.	mm	B	Pul.	FRISO TABLERO MYROSLAWA
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HART-650 63.5 2"1/2 12.7 1/2  
HART-651 76.2 3" 12.7 1/2  
HART-652 88.9 3"1/2 12.7 1/2



VASTAGO DE  
12.7mm (1/2)



No. CATALOGO	mm	A	Pul.	mm	B	Pul.	FRISO TABLERO SHANTALL
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HART-653 63.5 2"1/2 12.7 1/2  
HART-654 76.2 3" 12.7 1/2  
HART-655 88.9 3"1/2 12.7 1/2



VASTAGO DE  
12.7mm (1/2)

No. CATALOGO	mm	A	Pul.	mm	B	Pul.	FRISO TABLERO KATYA
--------------	----	---	------	----	---	------	---------------------

HART-656 63.5 2"1/2 12.7 1/2  
HART-657 76.2 3" 12.7 1/2  
HART-658 88.9 3"1/2 12.7 1/2



VASTAGO DE  
12.7mm (1/2)



No. CATALOGO	mm	A	Pul.	mm	B	Pul.	FRISO TABLERO CURVO
--------------	----	---	------	----	---	------	---------------------

HART-659 63.5 2"1/2 12.7 1/2  
HART-660 76.2 3" 12.7 1/2  
HART-661 88.9 3"1/2 12.7 1/2



VASTAGO DE  
12.7mm (1/2)

No. CATALOGO	mm	A	Pul.	mm	B	Pul.	FRISO TABLERO CHAFLAN
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HART-662 63.5 2"1/2 12.7 1/2  
HART-663 76.2 3" 12.7 1/2  
HART-664 88.9 3"1/2 12.7 1/2



VASTAGO DE  
12.7mm (1/2)





## FRISO TABLERO HOWARD

### No. CATALOGO

mm A Pul.

mm B Pul.

HART-665  
HART-666  
HART-667

63.5 2"1/2  
76.2 3"  
88.9 3"1/2

12.7 1/2  
12.7 1/2  
12.7 1/2



VASTAGO DE  
12.7mm (1/2)

### No. CATALOGO

mm A Pul.

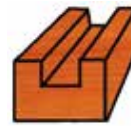
mm B Pul.

## RECTA DE CARBURO DE 2 FILOS

HART-702 3.2 1/8 9.5 3/8  
HART-703 6.4 1/4 19.0 3/4  
HART-704 8.0 5/16 19.0 3/4  
HART-705 9.5 3/8 25.4 1"  
HART-706 11.1 7/16 25.4 1"  
HART-707 12.7 1/2 31.7 1"1/4  
HART-707-1 12.7 1/2 50.8 2"  
HART-707-4 12.7 1/2 50.8 2"  
HART-708 15.9 5/8 31.7 1"1/4  
HART-709 19.0 3/4 31.7 1"1/4  
HART-709-1 19.0 3/4 50.8 2"

3 filos

VASTAGO DE  
12.7mm (1/2)



## FONDEADOR

### No. CATALOGO

mm A Pul.

mm B Pul.

HART-710  
HART-711  
HART-712  
HART-712-1  
HART-713

25.4 1"  
28.5 1"1/8  
31.7 1"1/4  
35.0 1"3/8  
38.1 1"1/2

24.2 61/64  
24.2 61/64  
24.2 61/64  
24.2 61/64  
24.2 61/64



VASTAGO DE  
12.7mm (1/2)

### No. CATALOGO

mm Pul.

## ARRECIFE

Z-4 801 15.9 5/8  
Z-4 802 19.0 3/4  
Z-4 803 22.2 7/8  
Z-4 804 25.4 1"

BARRENO DE  
25.4mm (1")



## REDONDEADOR

### No. CATALOGO

mm Pul.

Z-4 805 22.2 7/8  
Z-4 806 25.4 1"



BARRENO DE  
25.4mm (1")

### No. CATALOGO

mm A Pul.

## CONCHA

Z-4 807 15.9 5/8  
Z-4 808 19.0 3/4  
Z-4 809 22.2 7/8  
Z-4 810 25.4 1"

BARRENO DE  
25.4mm (1")



## PIRAÑA



### No. CATALOGO

### mm

### Pul.

Z-4 811  
Z-4 812  
Z-4 813

19.0  
22.2  
25.4

3/4  
7/8  
1"



BARRENO DE  
25.4mm (1")

### No. CATALOGO

### mm

### Pul.

Z-4 814      15.9      5/8  
Z-4 815      19.0      3/4

### MACHIMBRADOR



BARRENO DE  
25.4mm (1")

## GALAPAGO



### No. CATALOGO

### mm

### Pul.

Z-4 816  
Z-4 817  
Z-4 818

19.0  
22.2  
25.4

3/4  
7/8  
1"



BARRENO DE  
25.4mm (1")

### No. CATALOGO

### mm

### A

### Pul.

Z-4 819      19.0      3/4  
Z-4 820      22.2      7/8  
Z-4 821      25.4      1"

### PEDERNAL



BARRENO DE  
25.4mm (1")

## BARRACUDA



### No. CATALOGO

### mm

### Pul.

Z-4 822  
Z-4 823  
Z-4 824

19.0  
22.2  
25.4

3/4  
7/8  
1"



BARRENO DE  
25.4mm (1")

### No. CATALOGO

### mm

### A

### Pul.

Z-4 825      19.0      3/4  
Z-4 826      22.2      7/8  
Z-4 827      25.4      1"

### MEDIA LUNA



BARRENO DE  
25.4mm (1")

## ANEMONA



No. CATALOGO	mm	Pul.
Z-4 828	19.0	3/4
Z-4 829	22.2	7/8
Z-4 830	25.4	1"



BARRENO DE 25.4mm (1")

## No. CATALOGO

mm

Pul.

## DIENTE DE TIBURON

Z-4 831	25.4	1"
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BARRENO DE 25.4mm (1")

## CHAFLAN 30°



No. CATALOGO	mm	Pul.
Z-4 832	19.0	3/4
Z-4 833	22.2	7/8
Z-4 834	25.4	1"



BARRENO DE 25.4mm (1")

## No. CATALOGO

mm

A

Pul.

## GLOBO

Z-4 835	15.9	5/8
Z-4 836	19.0	3/4
Z-4 837	22.2	7/8
Z-4 838	25.4	1"

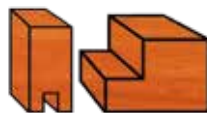


BARRENO DE 25.4mm (1")

## ACANALADOR



No. CATALOGO	mm	Pul.
Z-4 839	6.4	1/4
Z-4 840	9.5	3/8
Z-4 841	12.7	1/2
Z-4 842	15.9	5/8
Z-4 843	19.0	3/4
Z-4 844	22.2	7/8
Z-4 845	25.4	1"



BARRENO DE 25.4mm (1")

## No. CATALOGO

mm

A

Pul.

## CORAL

Z-4 846	19.0	3/4
Z-4 847	22.2	7/8
Z-4 848	25.4	1"



BARRENO DE 25.4mm (1")

## ERIZO

### No. CATALOGO

mm

Pul.



Z-4 849	19.0	3/4
Z-4 850	22.2	7/8
Z-4 851	25.4	1"



BARRENO DE  
25.4mm (1")

### No. CATALOGO

mm

Pul.

## PECHO PALOMA

Z-4 852	19.0	3/4
Z-4 853	22.2	7/8
Z-4 854	25.4	1"



BARRENO DE  
25.4mm (1")

## DELFIN

### No. CATALOGO

mm

Pul.



Z-4 855	19.0	3/4
Z-4 856	22.2	7/8
Z-4 857	25.4	1"



BARRENO DE  
25.4mm (1")

### No. CATALOGO

mm

A

Pul.

## CASTOR

Z-4 858	19.0	3/4
Z-4 859	22.2	7/8
Z-4 860	25.4	1"



BARRENO DE  
25.4mm (1")

## CARACOL

### No. CATALOGO

mm

Pul.



Z-4 861	19.0	3/4
Z-4 862	22.2	7/8
Z-4 863	25.4	1"



BARRENO DE  
25.4mm (1")

### No. CATALOGO

mm

A

Pul.

## CONICA

Z-4 864	19.0	3/4
Z-4 865	22.2	7/8
Z-4 866	25.4	1"



BARRENO DE  
25.4mm (1")

## CARITA



No. CATALOGO	mm	Pul.
Z-4 867	19.0	3/4
Z-4 868	22.2	7/8
Z-4 869	25.4	1"



BARRENO DE  
25.4mm (1")

## No. CATALOGO

mm

Pul.

## COLLARIN

Z-4 870	19.0	3/4
Z-4 871	22.2	7/8
Z-4 872	25.4	1"



BARRENO DE  
25.4mm (1")



## LAMBRIN

## No. CATALOGO

mm

Pul.

Z-4 873 19.0 3/4



BARRENO DE  
25.4mm (1")

## No. CATALOGO

mm

A

Pul.

mm

B

Pul.

## AVELLANADOR PARA VIDRIO

HART-901	6.4	1/4	4.8	3/16
HART-902	6.4	1/4	6.4	1/4
HART-903	6.4	1/4	8.0	5/16
HART-904	9.5	3/8	9.5	3/8
HART-905	12.7	1/2	12.7	1/2



VASTAGO DE  
6.4mm (1/4)

## ESCOPLO

## No. CATALOGO

mm

A

Pul.

mm

B

Pul.



VASTAGO DE  
12.7mm (1/2)

DM-1001	6.4	1/4	50.8	2"
DM-1002	8.0	5/16	50.8	2"
DM-1003	9.5	3/8	50.8	2"
DM-1003-1	9.5	3/8	50.8	2"
DM-1004	12.7	1/2	50.8	2"
DM-1004-1	12.7	1/2	50.8	2"
DM-1005	15.9	5/8	50.8	2"
DM-1006	19.0	3/4	50.8	2"

## No. CATALOGO

mm

A

Pul.

mm

B

Pul.

## MANITA

DM-1025	9.5	3/8	152.4	6"
DM-1026	12.7	1/2	152.4	6"
DM-1027	15.9	5/8	152.4	6"
DM-1028	19.0	3/4	152.4	6"
DM-1029	22.2	7/8	152.4	6"
DM-1030	25.4	1"	152.4	6"

VASTAGO DE  
6.4mm (1/4)



# BROCAS Y CUCHILLAS PARA ROUTER

EN ACERO Y CARBURO DE TUNGSTENO

No. CATALOGO	mm	A	Pul.	mm	B	Pul.	Vastago	CLAVACOTE
DM-1050	6.4	1/4		44.4	1 3/4	1/2		
DM-1051	9.5	3/8		44.4	1 3/4	1/2		
DM-1052	12.7	1/2		44.4	1 3/4	1/2		
DM-1053	15.9	5/8		44.4	1 3/4	1/2		
DM-1054	6.4	1/4		31.7	1 1/4	1/4		
DM-1055	9.5	3/8		31.7	1 1/4	1/4		
DM-1056	12.7	1/2		31.7	1 1/4	1/4		

AVELLANADOR (PARA BROCA AL CENTRO)	No. CATALOGO	mm	A	Pul.	mm	B	Pul.
	HART-1101	9.5		3/8	54.0		2 1/8



VASTAGO DE  
9.5mm (3/8")

## FRIZADORES EN ACERO Y CARBURO DE TUNGSTENO

DIAMETRO TOTAL  
152.4mm 6"

DIAMETRO INTERIOR  
25.4mm 1"

LARGO DE CORTE  
50.8mm 2"

ALTO DE CORTE  
20.2mm 51/64

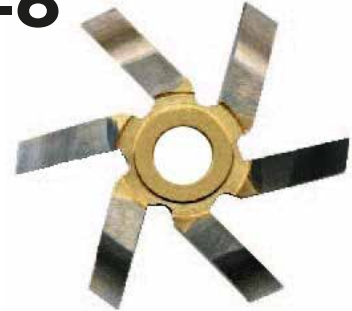
Z-3



Z-4



Z-6



8901



8907



8913



8902



8908



8914



8903



8909



8915



8904



8910



8916



8905



8911



8917



8906



8912



8918



# MICRO

HERRAMIENTAS



*Grupo Aleman.*