



**assembling equipment**



# Caterpillar Fluid Systems



Caterpillar Fluid Systems manufacture high quality hydraulic hose and coupling for both the **OEM** and **General Market business** sectors.

The Anchor product line includes **many different configurations of hose and couplings** from small diameters up to the large bore hose products.



A close-up, low-angle shot of a crimping machine, likely a slide bearing crimping machine, with a strong red color overlay. The machine's components, including a die and a punch, are visible, showing the precision engineering of the tool. The red overlay is most prominent in the upper right corner, creating a bold, industrial aesthetic.

## WORKSHOP CRIMPERS

Compact, mobile and powerful

**Should workshops and mobile service teams do without the power and reliability of large stationary crimpers? No!**

The **slide bearing technology** may prove its advantages in lightweight, inexpensive equipment fitting into almost any vehicle and workshop.

Even the economical **ECOLINE** models allow for rapid repair, without any loss in power, robustness and reliability.

The slide bearing technology prevents crimp force friction losses and **needs no lubrication**.

This makes working clean and the machines are almost **maintenancefree**, except for the occasional replacement of the brackets.

S2 M

LxWxH: 500x420x440 mm



S2 P

LxWxH: 380x400x310 mm



	S2 M	S2 P
Crimp force (kN / Ton)	900 / 90	900 / 90
No grease: 20% less friction		
SAE R 12 / 4SP* 1 piece	1 1/4"	1 1/4"
SAE R 15 / 4SH* 2 piece	1"	1"
Industrial	1 1/4"	1 1/4"
90° Elbows	1"	1"
Crimp range	63 mm**	63 mm**
Opening	+22 mm	+22 mm
Opening without dies	77 mm	77 mm
Type of dies	263	263
Drive	Manuell Manual	Druckluft Pressure
Oil	0,75 l	1,4 l
Weight	32 kg	33 kg

Type of dies	263
Ø mm	mm
6,8	40
9	75
12	75
14	75
17	75
20	75
24	75
28	75
32	75
36	75
40	75
44	75
47	75

S2 Package = Machine + PB Ø 17, 20, 24, 28, 32, 40 + QDS 261 B

- \* According to the fitting.
- \*\* With master dies.

INCLUDED

QDS 263 B



OPTIONS

DETAILS: SEE PAGE 33

PTS system



TU



# S6 Ecoline

LxWxH: 700x600x735 mm



S6 Ecoline		
Crimp force (kN /Ton)	2000 / 200	
No grease: 20 % less friction		
Control	Control A	
SAE R 15* / 4SH	1 piece	2"
4 SH* 2 Teil	2 piece	2"
SAE R 15*	2 piece	1 1/2"
Industrial	3"	
90° Elbows	2"	
Crimp range	100 mm	
Opening	+45 mm	
Opening without dies	147 mm	
Type of dies	236 L / 266 L	
Speed	close: 4,9 mm/sec crimp: 2,3 mm/sec open: 8,2 mm/sec	
Noise level	69 dBA	
Drive	4 kW	
Oil	50 l	
Weight	248 kg	

Options		
12 / 24 Volt		✓
1 Phase		✓

Type of dies	236 L	266 L**
Ø mm	mm	mm
6,8	40	40
9	70	70
12	70	70
14	70	70
16	70	70
17	70	70
19	70	70
20	70	70
22	70	70
24	70	70
26	70	70
28	85	85
32	85	85
36	85	85
40	85	85
44	85	85
47	110	110
50	110	110
54	110	90
57	110	90 / 110
62	110	90 / 110
67		90 / 110
71		100 / 110
74		100 / 110
78		110
84		110
86		110
92		110

\* According to the fitting.  
\*\* Intermediate dies not required.

INCLUDED		OPTIONS									
		DETAILS: SEE PAGE 33									
QDS 239 B	PTS system	QDS 239 R	SHS	TU							
QDC 239.5	QDS 239 C	QDS 239 S	LUS / LUF								

# S3 Ecoline

LxWxH: 592x545x672 mm



S3 Ecoline	
Crimp force (kN / Ton)	1200 / 120
No grease: 20 % less friction	
Control	Control A
SAE R 15 / 4SH* 1 piece	1 1/4"
SAE R 15 / 4SH* 2 piece	1"
SAE R 12* / 4SP 2 piece	1 1/4"
Industrial	2"
90° Elbows	1 1/2"
Crimp range	70 mm
Opening	+35 mm
Opening without dies	105 mm
Type of dies	239
Speed	Close: 4 mm/sec. Crimp: 4 mm/sec. Open: 6,5 mm/sec.
Noise level	69 dBA
Drive	3kW
Oil	35 l
Weight	150 kg

Options	
12 / 24 Volt	✓
1 Phase	✓

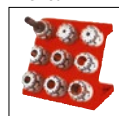
Type of dies	239
Ø mm	mm
6,8	40
9	50
12	50
14	60
16	60
17	60
19	60
20	60
22	60
24	60
26	75
28	75
32	75
36	75
40	75
44	75
47	75
50	75
54	75
57	75
62	75

\* According to the fitting.

## OPTIONS

DETAILS: SEE PAGE 33

QDS 239 R



PTS system



TU



QDS 239 C



LUS / LUF



# S10

LxWxH: 690x600x1400 mm



	S10
Crimp Force (kN / Ton)	2800 / 280
No Grease: 20 % less friction	
Control	Control A
SAE R 15 / 4SH* 1 piece	2"
4SH* 2 piece	2"
SAE R 15* 2 piece	2"
Industrial	4"
90° Elbows	2"
Crimp range	139 mm
Opening	+45 mm
Opening without dies	190 mm
Type of dies	239 L / 237 L **
Speed	Close: 6,1 mm/sec. Crimp: 1,7 mm/sec. Open: 10,3 mm/sec.
Noise level	69 dBA
Drive	5,5 kW
Oil	55 l
Weight	390 kg

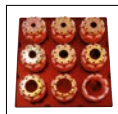
Type of dies	239 L	237 L **
Ø mm	mm	mm
6,8	40	
9	70	
12	70	
14	70	
16	70	
17	70	
19	70	
20	70	
22	70	
24	70	
26	70	
28	85	
32	85	
36	85	
40	85	
44	85	
47	110	
50	110	
54	110	118
57	110	118
62	110	118
67		118
71		118
74		118
78		118
84		118
86		118
90		118
96		118
103		118
106		126
111		126
116		126
121		126
126		126
131		126

S10 Package = Machine + PB Ø 17, 20, 24, 28, 32, 40, 44, 50, 57, 71 + 237.239.2L2

- \* According to the fitting.
- \*\* Intermediate dies not required.
- \*\*\* Only with Control B+Touch.
- # Option available only on purchasing

## INCLUDED

QDS 239 B



QDC 239.5



## OPTIONS

DETAILS: SEE PAGE 33 AND 34

CONTROL B+Touch<sup>†</sup>



UTS\*\*\* #



OIL COOLER



PS\*\*\* #



TA (depth stop)



QDS 239 C



PTS system



QDS 239 S



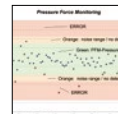
SHS



LUS / LUF



PFM



# HM 375

LxWxH: 1600x600x1600 mm



	HM 375
Crimp force (kN / Ton)	3150 / 315
No grease: 20 % less friction	
Control	Control B + Touch
SAE R 15 / 4SH* 1 piece	3"
SAE R 15 / 4SH* 2 piece	3"
Industrial	4" (6")**
90° Elbows	3"
Crimp range	161 mm
Opening	+70 mm
Opening without dies	215 mm
Type of dies	239 L / 237 L
Speed (mm/sec.)	Close: 23 mm/sec. Crimp: 1,4 mm/sec. Open: 33 mm/sec.
Noise level	62 dBA
Drive	4 kW
Oil	100 l
Weight	750 kg
CGS (Conicity Guard System)	
HiDS (High Pressure Pump Dynamic Suction)	

Type of dies	239 L 237 L ***
Ø mm	mm
6,8	40
9	70
12	70
14	70
16	70
17	70
19	70
20	70
22	70
24	70
26	70
28	85
32	85
36	85
40	85
44	85
47	110
50	110
54	110 / 118
57	110 / 118
62	110 / 118
67	118
71	118
74	118
78	118
84	118
86	118
90	118
96	118
103	118
106	126
111	126
116	126
121	126
126	126
131	126

HM 3 Package = Machine + PB Ø 17, 20, 24, 28, 32, 40, 44, 50, 57, 71+ 237.239.2L2

\* According to the fitting.

\*\* Without flange.

\*\*\* Intermediate dies not required.

INCLUDED	STANDARD	OPTIONS	DETAILS: SEE PAGE 33 AND 34					
QDS 239 B	CONTROL B+Touch	PTS system	QDS 239 C	PFM	PS***	QDS 239 R	OCS 10 retro	
QDC 239.5	TA (depht stop)	UTS***	OIL COOLER	QDS 239 S	SHS	LUS / LUF		



# OPTIONS

## QDS 239 C\*/T\*\*



Mobile die storage  
239 / 239 L (12 or 24 set)  
and 232 L (2 or 4 Set).  
\* C is with only one shelf .  
\*\*T is with 2 shelf.

## QDS 239 S / 239 R



To store dies directly at the machine,  
to bolt on the wall (for 239 / 239 L and  
232L) or on the table.

## OCS 10 retro



Camera system - the alternative  
to the mirror, for a better sight line  
adjustment.

## PS



To close the crimper.

## TU



Workbench for miscellaneous  
machines.

## OIL COOLER



Prevent the heating of hydraulic oil.  
A constant oil temperature leads  
to reproducible crimp results.

## SHS



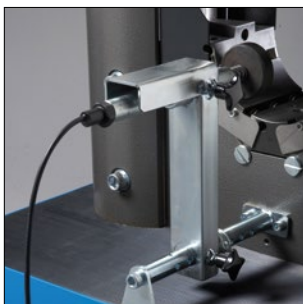
Allows the operator to watch the  
correct position of the part  
to be crimped behind the machine.

## LUS/LUF



Light for the rear site of the machine.

## TA (depth stop)



To position the fittings inside the head  
and/or to complete the crimp cycle  
automatically.

## PTS system



Marking and crimping in one step according  
to DIN 20066 and EN 853, EN 854, EN 856, EN 857.

### PTS 52

Character 4 x 2,0 mm / marking depth ca. 0,3 - 0,5 mm

### PTS 32

Character 3 x 1,5 mm / marking depth ca. 0,3 mm

DIES	Ø mm
261	14 - 47
263	14 - 32
265	54 - 71
266L	54 - 78
239 / 239 L	14 - 50
232 L	14 - 90
237 L	54 - 121
554 / 246 L	on request

Amount of characters
<b>P 200, 202, 204, 213, 261, 265</b> always 10 each
<b>P 262</b> Ø 14 - 32 = 17 each
<b>P 239</b> Ø 14 - 24 = 12 each Ø 26 - 50 = 17 each
<b>P 239L</b> Ø 14 - 22 = 14 each Ø 24 - 40 = 15 each Ø 44 - 50 = 10 each
<b>P 232L</b> Ø 17 - 20 = 21 each Ø 24 - 28 = 22 each Ø 40 - 44 = 24 each Ø 47 - 62 = 10 each Ø 67 - 90 = 11 each
<b>P 237L</b> Ø 54 - 67 = 24 each Ø 71 - 121 = 11 each

During a detailed examination with the PFM-option the quality of a production process was increased from 97,8% to 99,7%. 2% of all produced parts had defects and with the UNIFLEX PFM option it was prevented that these defective parts were delivered to customers.

Wahl 2016 - Wahl 2016

Ergebnisse

Wahlkreis 1

Kandidat	Stimmen	Prozent	Gültigkeit
Kandidat: Schmidt, Hans-Joachim	412	44,3%	100%

Zusätzliche Informationen

Details

UTS enables a comfortable article entry via the PC. The data can be entered in a set MS Excel-sheet and be transferred with UTS to the UNIMATICControl-B + TOUCH. Therefore it is possible to compare the data from a number of machines, provide documentation (date + time), back-tracking and backup in one go. All crimpings can be documented with UTS, especially with the PFM option, which saves the pressure value as additional parameter.

notes

# CUTTING MACHINES

## Clean cutting, safe handling

**ANCHOR** hose cutting machines have been a synonym for highest precision and robustness.

The solid and compact tools distinguish themselves by their safe and **high-quality cutting function**.

A distinct property is the positioning of the extraordinarily sharp cutting blades close to the powerful motors. This significantly reduces vibration – which is one of the reasons for **extreme durability** and **low maintenance expenses**.

Users also appreciate cutting with almost no scales and extraordinarily little smoke.

Low energy consumption contributes to **high economic efficiency**, in particular in series production.

CE-compliant brake motors and protection enclosures not impeding the working progress leaves nothing to be desired, **even in safety issues**.

EM 8 M

LxWxH: 983x760x875 mm



EM 8 P

LxWxH: 983x760x540 mm



	EM 8 M	EM 8 P
Production SAE R 13 & SAE R 15*	1 1/4"	1 1/4"
Workshop SAE R 13 & SAE R 15*	2"	2"
SAE R 12	2"	2"
Industrial	4"	4"
Max. outside	Ø 120 mm	Ø 120 mm free passage front
Noise level	90 dBA	90 dBA
Brake motor		
Suction connection	Ø 60 mm	Ø 60 mm
Drive	4,6 kW	4,6 kW
Cutting blade	400x4x30 mm	400x4x30 mm
Weight	122 kg	140 kg

Options		
Bench	✓	✓
Pneumatic feed	–	✓
Suction device**	✓	✓

\* With special cutting blade.  
\*\* Adapter needed.

OPTIONS

DETAILS: SEE PAGE 39

UVC Package



UAT 4



USH 4



TU



UAT 10





# EM 3

LxWxH: 540x440x300 mm



# EM 3 Ecoline

LxWxH: 400x510x540 mm



	EM 3	EM 3 Ecoline <sup>1</sup>
Production	3/4"	–
SAE R 13 & SAE R 15*		
Workshop	1 1/4"	1"
SAE R 13 & SAE R 15*		
SAE R 12	1 1/4"	1 1/4"
Industrial	2"	1 1/4"
Max. outside	Ø 80 mm	Ø 52 mm
Noise level	60 dBA	65 dBA
Brake motor		–
Suction connection	Ø 80 mm	Ø 40 mm
Drive	3 kW	1,8 kW
Cutting blade	275x3x30 mm	200x1,6x25,4 mm
Weight	50 kg	20 kg

Options		
Bench	✓	✓
Suction device**	✓	✓

\* With special cutting blade.

\*\* Adapter needed.

<sup>1</sup> Not for make-to-stock.

## OPTIONS

DETAILS: SEE PAGE 39

UVC Package



UAT 4



USH 4



TU



UAT 10



EM 110 H

LxWxH: 800x780x1700 mm

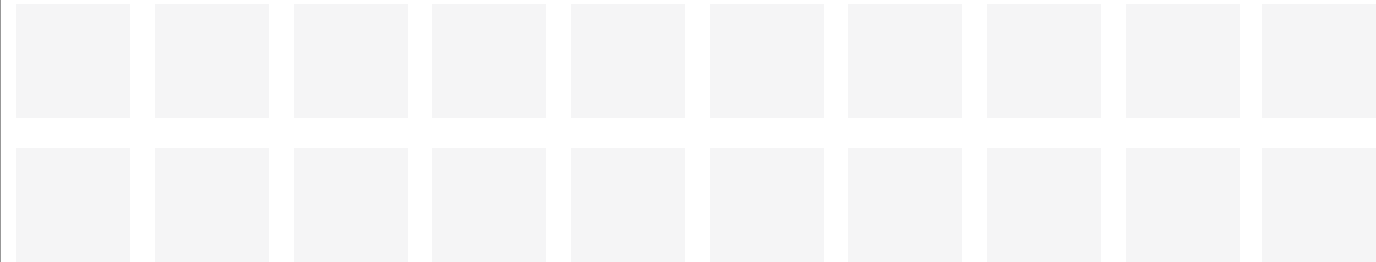


EM 115

LxWxH: 1200x650x1650 mm



	EM 100 H	EM 115
Workshop SAE R13 & SAE R15	3"	3"
Production SAE R13 & SAE R15	3"	2"
SAE R12	2"	2"
Industrial	4"	4"
Maxi outside	Ø 125 mm	Ø 125 mm
Cooling	air	–
Noise Level	69 dBA	72 dBA
Brake Motor	YES	YES
Suction connection	Ø 100 mm	Ø 108 mm
Drive	P: 75 kW U: 3PEN 400 VAC I: 15,4 A f: 50 Hz	P: 75 kW U: 3PEN 400 VAC I: 15,4 A f: 50 Hz
Cutting blade	TMG 520x4x40 mm	TMG 520x4x40 mm
Weight	280 kg	245 kg
Feed Hydro-Pneumatic	hydro-pneumatic	pneumatic



## OPTIONS

### TU



Workbench is for all machines mountable on a table (in this case EM 8, EM 3).

### UVC Package



Suction device with spark arrester (UVC S36-21 + UVC S36-FL).

<b>777.054</b>	Ø 40 mm	EM 3.2 ecoline
<b>777.055</b>	Ø 50 mm	EM 8.3
<b>777.056</b>	Ø 80 mm	EM 3

### UAT 4



Small hose winder to store hoses.

<b>Ø</b>	900 mm
<b>LxWxH</b>	1150x1300x900 mm
<b>Weight</b>	65 kg

### UAT 10



Large hose winder to store hoses.

<b>Ø</b>	1200 mm
<b>LxWxH</b>	1450x1300x1200 mm
<b>Weight</b>	90 kg

### USH 4



Hose winder for the easy storage of your hydraulic hoses up to seven levels.

<b>cage-Ø outside/inside</b>	820 / 760 mm
<b>external dimension</b>	1000 mm
<b>level high</b>	310 mm





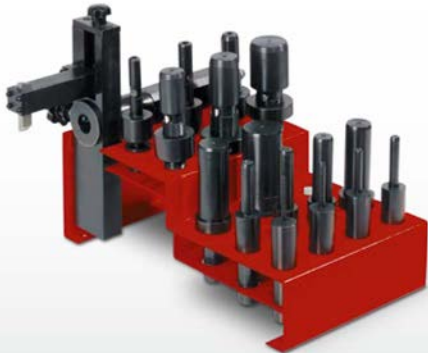
# SKIVING MACHINES

Hose skiving machines for hydraulic hoses outside, inside, or both in a single step.



USM 2

LxWxH: 338x465x445 mm



USM 10

LxWxH: 440x440x545 mm



	USM 2	USM 10
Internal skiving	5/8" – 2"	5/8" – 2"
External skiving	3/16" – 2"	3/16" – 2"
Noise level	–	60 dBA
Drive	Manuell / Manual	0,37 kW (3~)
Weight	16 kg	35 kg
Tool revolution	–	110 rpm

Options		
Bench	✓	✓

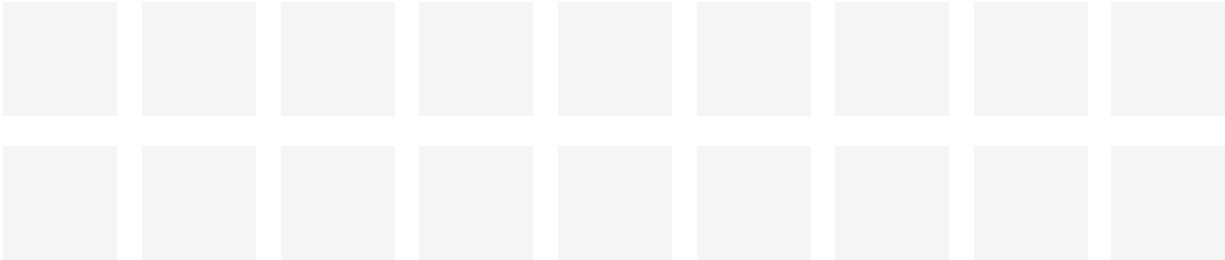
USM 2 Package = Machine + external skiving mandrels (PJ\_EXB 250- DN 05, 06, 08, 10, 12, 16, 19, 25, 32,38, 50) + internal skiving tool (UIS.2 DN 16, 19, 25, 32, 38, 51).

USM 10 Package = Machine + external skiving mandrels (PJ\_EXB 250- DN 05, 06, 08, 10, 12, 16, 19, 25, 32,38, 50) + internal skiving tool (UIS.2 DN 16, 19, 25, 32, 38, 51).

OPTIONS

DETAILS: SEE PAGE 44

TU



USM 100

LxWxH: 780x620x550 mm



	USM 100
Internal skiving	3/4" – 2"
External skiving	1/4" – 2"
Noise level	60 dBA
Drive	1,2 / 1,8 kw (3~)
Weight	70 kg
Tool revolution	392 rpm / 592 rpm

Options	
Bench	✓

USM 100 Package = Machine + 5 internal skiving tools UIT Ø20- Ø50 + 5 mandrels UOP 6,8,10,12,16 + 1 external skiving tools (UOT 6 - 50) + 1 chuck (307903).

STANDARD USM 100



Double internal and external blades

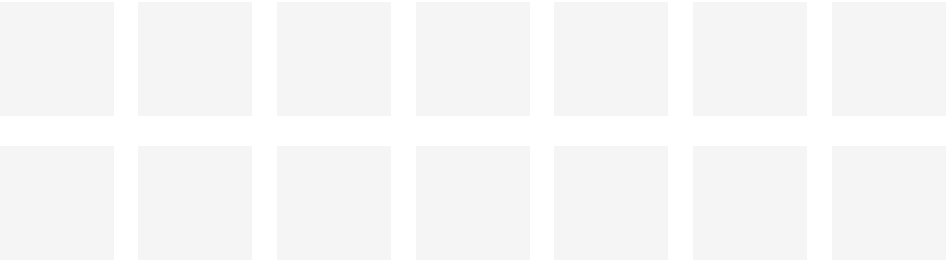


SSG  
Slitting tool - to keep the skiving chips short

OPTIONS

DETAILS: SEE PAGE 44

TU



OPTIONS

TU



Workbench for miscellaneous machines.

notes

Notes section with horizontal lines for writing.





## PERIPHERAL EQUIPMENT

### A comprehensive range

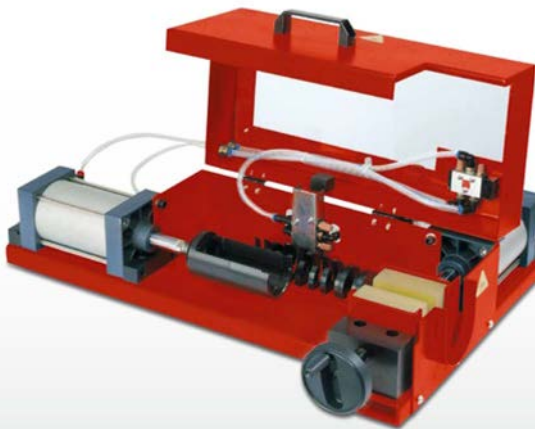
**Full service until delivery of functional, clean and inspected work pieces is essential for hose manufacture today. For this reasons, Anchor offers the entire workshop equipment.**

Pneumatic inserters facilitate even the installation of very heavy or bent fittings. Marking tools represent an **inexpensive solution** for the indispensable compliance with CE standards.

Test benches are used for reliable and ecological tests of finished work pieces - which is also required for reasons of **product liability**.

# Nipple Inserter

LxWxH: 600x810x310 mm



UNE 10.1	
Max. nipple insertion (OD fitting, straight or elbow)	< 2"*
Force	4,7 kN (6 bar)
Piston stroke	100 mm
Weight	35 kg
Connection	6 bar

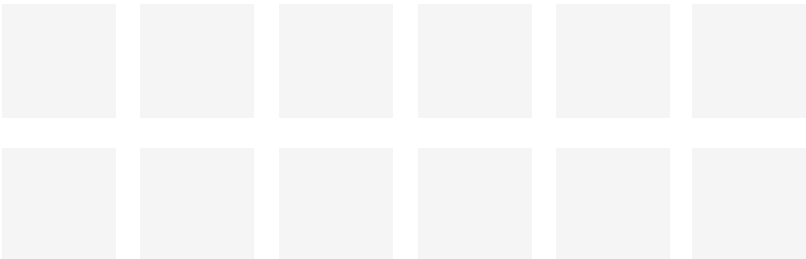
\* Depending on the manufacturer

## STANDARD

Established standard functions: 10 inserts for hose ferrules with bended tubes (Ø 12, 15, 18, 22, 28, 34, 42, 54 mm and one closed insert)

## OPTIONS

TU



# Cleaning Machine

LxWxH: 2000x840x1050 mm



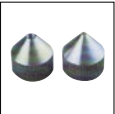
	RG 10
Drive	Diaphragm pump, 7 bar Air
Flow	180 l/min
Max. air consumption	250 NI/min
Working range	Bis / up to 2" ID
Max. length, depending on bore size	20 m / 65 feet
Capacity	215 l
Working area	800x1600
Cleaning agent	Non toxic and corrosion free
Weight	160 kg

Options	
Filter	10µ

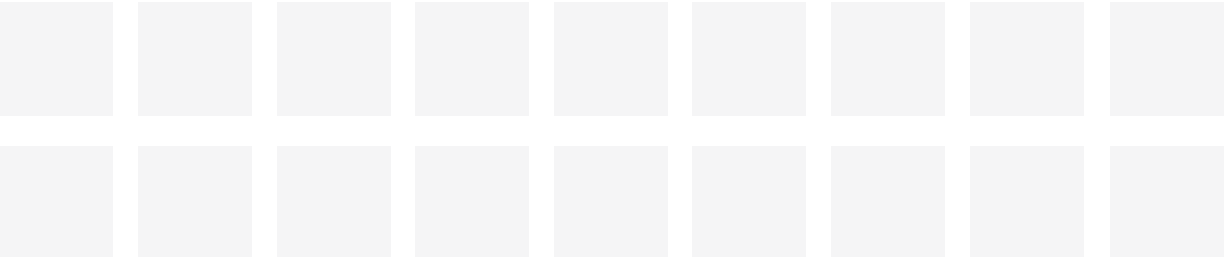
STANDARD

OPTIONS

FLUSHING CONES



SUCTION FILTER



# Marking Tool UP10 Ecoline

LxWxH: 285x265x410 mm



	UP 10 Ecoline
Marking area	Ø 8 - 80 mm
Marking depth	~ 0,5 mm
Insertable steel characters	26 Pieces
Weight	10 kg

Marking depth depends on the adjustment of the marking roll.  
UP 10 Package = UP 10 Ecoline + UPTS 10.

PACKAGE

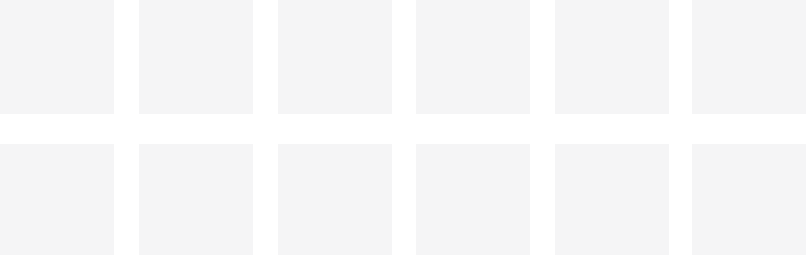
- Letters  
1x A, B, I, N, R, S, /, 2x P, 10x space, 4x letter of own choice  
4 mm high / 2,5 mm wight
- Numbers  
6 x 1; 5 x 2,3,4,5; 4 x 6; 3 x 7,8,9; 4 x 0
- Wild character  
1 x 504.033.4 (5-fold) + 504.034.4 (10-fold)
- Neutral  
Borstel, Tweezers, Mirror

OPTIONS

504.003 Type holder



TU





## Testbench P 160

Tank dimension LxWxH: 1590x795x370 mm  
Test bench dimension LxWxH: 2210x950x1325 mm



## Testbench P 160 Ecoline





Tank dimension LxWxH: 1200x600x250 mm  
Test bench dimension LxWxH: 1400x600x1200 mm



	P 160	P 160 Ecoline
Test pressure	150 - 1300 bar	150 - 1300 bar
Drive	Intensifier	Intensifier
Flow	1,1 l / min	1,1 l / min
Capacity	7 bar, 20 NI / min	7 bar, 20 NI / min
Reservoir capacity	100 l	33 l
Alternative drive	0,38 kW	–
Paint	RAL 5012 Blau / Blue RAL 7021 Grau / Grey	RAL 5012 Blau / Blue RAL 7021 Grau / Grey
Weight	210 kg leer / empty	120 kg leer / empty
Noise level	72 dBA	72 dBA

Accessories		
Operating manual	✓	✓
Suction filter 100 µm	✓	✓
Air preparation unit	✓	✓
Steck-O-Adapter (s-series only)	DN 4/6/8/10/12/ G 1/2" 405.901	DN 4/6/8/10/12/ G 1/2" 405.901
Steck-O-Adapter (s-series only)	R 1/4"/ 3/8"/ 1/2"/ 3/4"/G 1/2" 405.902	R 1/4"/ 3/8"/ 1/2"/ 3/4"/G 1/2" 405.902
Anticorrosive additive	EM 10 l	EM 10 l

P 160 Package = Machine + Steck-O-Adapter 405.901 and 405.902, EM 10 l

STANDARD	OPTIONS (FOR P 160)									
STECK-O-SYSTEM	CONTROL B + Touch	VA (Stainless Steel)								
										
	600.901 5 M									
										



## **Caterpillar Fluid Systems**

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