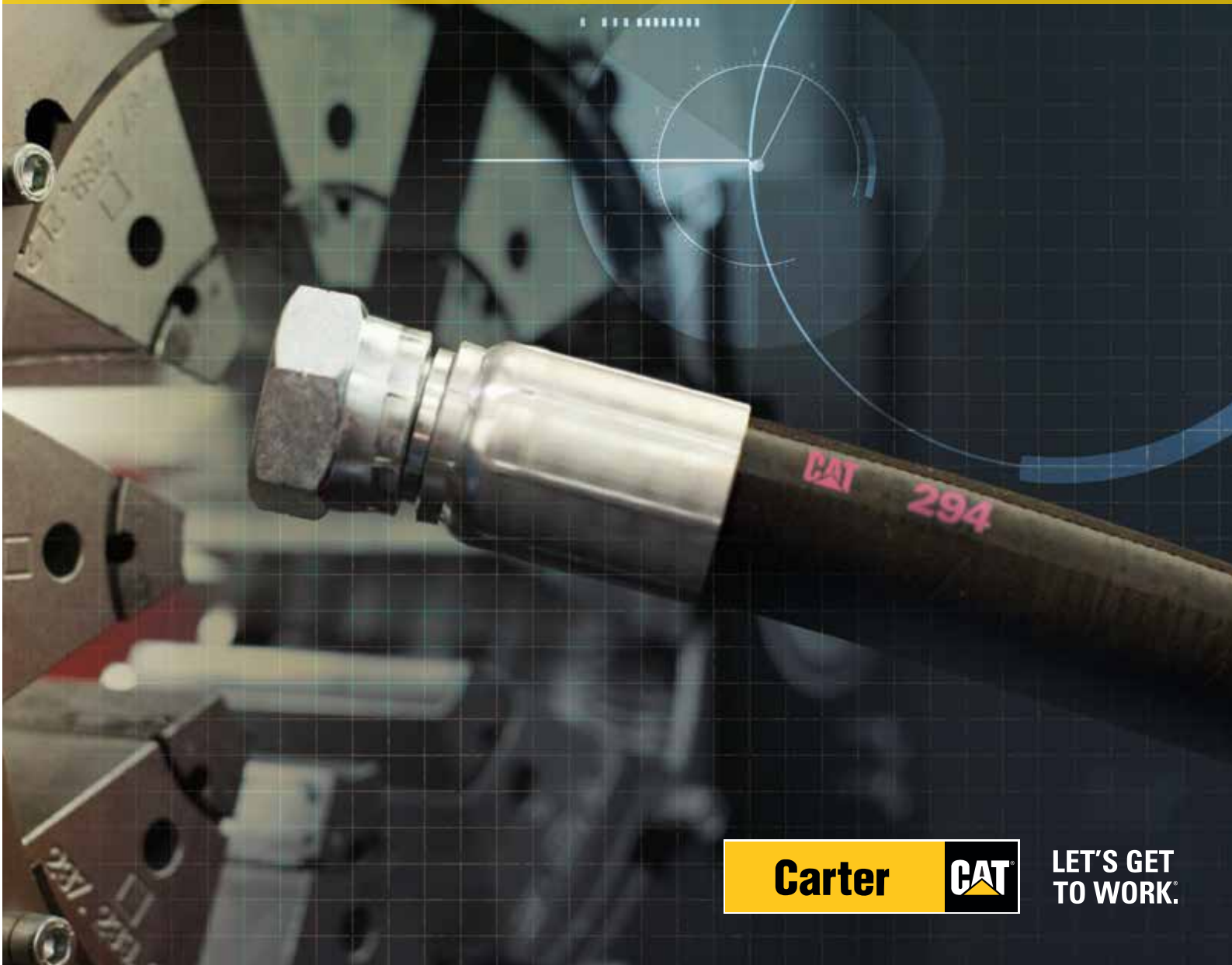


CAT[®] HOSE ASSEMBLY TOOLING

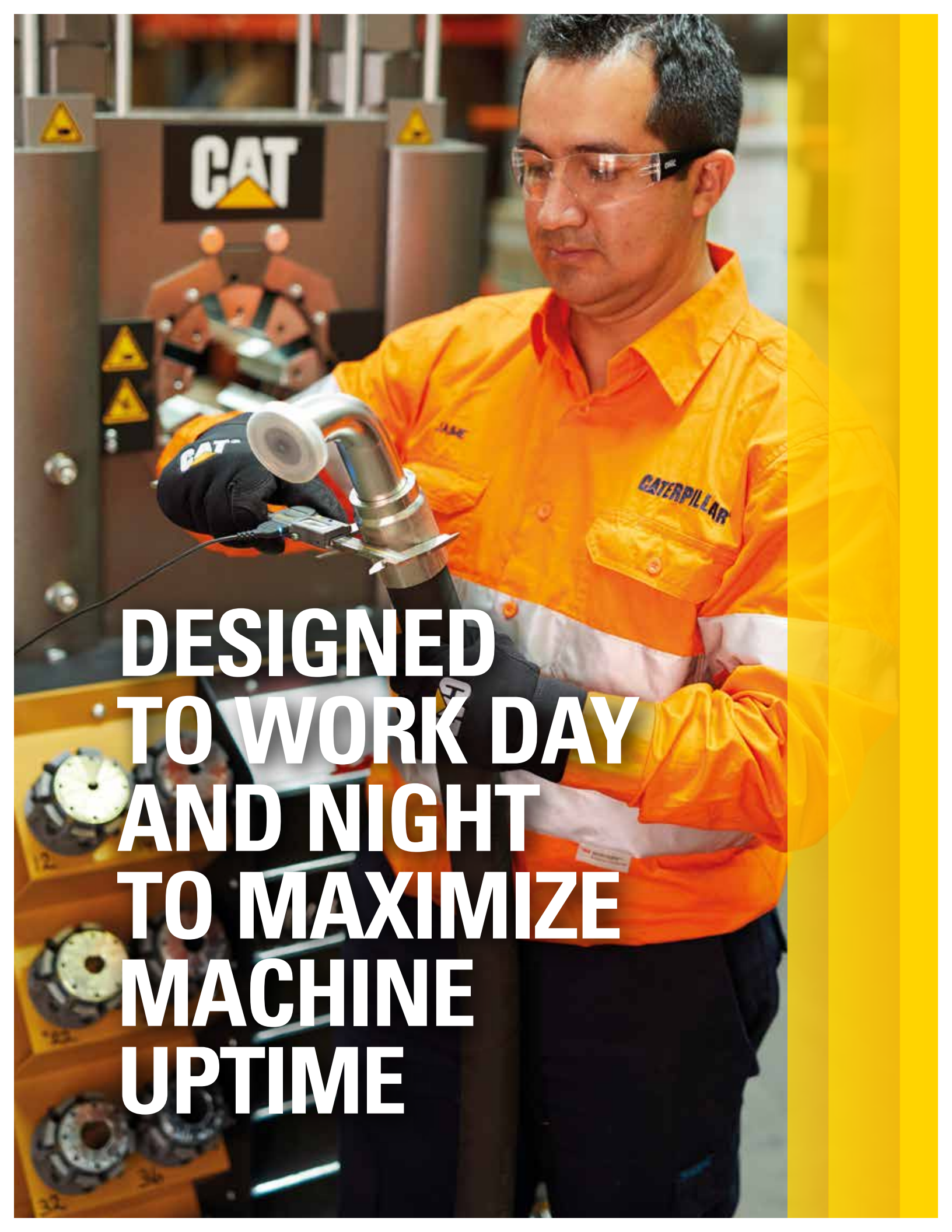
RELIABILITY AS STANDARD



Carter



**LET'S GET
TO WORK.**

A man wearing a high-visibility yellow and orange Caterpillar work shirt, safety glasses, and black gloves is working on a machine. He is holding a tool that looks like a welding torch or a similar industrial tool. The machine has a 'CAT' logo on it. The background shows a factory setting with various mechanical parts and equipment. The text 'DESIGNED TO WORK DAY AND NIGHT TO MAXIMIZE MACHINE UPTIME' is overlaid on the image in large, white, bold letters.

**DESIGNED
TO WORK DAY
AND NIGHT
TO MAXIMIZE
MACHINE
UPTIME**

HOSE FAILURES CAN CAUSE...

Equipment downtime



Project delays



Environmental damage







Serious injuries



All of which add to your costs and liability. To maximize productivity and reduce your overall Owning & Operating costs you need hydraulic hose assemblies that are designed and manufactured to work at peak performance.

That is where Cat® Hose Assembly Tooling comes into play – whether it's in the workshop, at the job site or mobile, Cat tooling is Built For It to meet and exceed your needs.

WHAT TOOLING IS NEEDED?

-  Cat Hose Saws for cleanest and most accurate hose cuts
-  Cat Hose Crimpers to assemble couplings to exact specifications for leak free performance
-  Cleaning and labeling equipment makes sure your hose is contamination free and easily identified
-  Test bench to verify assembly process, maximize safety and meet industry standards such as MDG41 mine site guidelines



UNRIVALED EXPERTISE

Cat is the only equipment OEM that offers a complete line of hoses, couplings and assembly tooling that work together as a system to provide hose assemblies that meet or exceed industry standards



SAFETY MINDSET

Cat Hose Assembly Tools and factory controlled crimp specifications ensure maximum safety and reliability. All tools are designed to provide ease of operation, robust product quality, and a cleaner and safer work area



UNMATCHED SUPPORT

Cat offers a comprehensive Hose Assembly Tooling product line to meet all application or budget needs



NOT JUST FOR CAT

The Cat Hose Assembly system approach enables hose assemblies to be made for all types of equipment and industry applications

CAT HOSE CRIMPERS

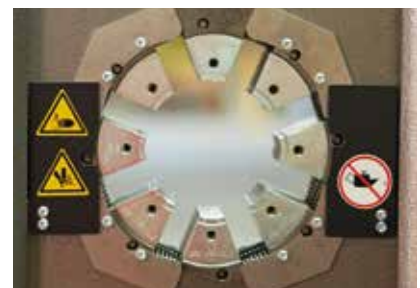


Crimping Machines are used to assemble permanent couplings to the hose. Each Cat Hose & Coupling combination requires a unique crimp dimension, which is certified through extensive laboratory testing.

Utilizing Cat Hose Assembly Tooling and hose assembly data ensures that your hose meets factory standard and provides the safest and most reliable connection.

Cat Hose Crimpers are Grease Free resulting in less daily maintenance and cleaner operation. Wear parts, such as slide bearings are simple and inexpensive to replace, leading to lower costs versus rebuilds of competitive machines.

Accurate crimp specifications for Cat Hose & Coupling combinations are achieved through Micrometer or Crimper Controls. Cat Crimper controls offer the highest level of simplicity and exact precision for maximum safety.





	S2	M6	S6	CPC325
Crimping Capability	1" XT-6ES	1.5" XT-6ES	1.5" XT-6ES	2" XT-6ES
	1.25" XT-3ES	2" XT-3ES	2" XT-3ES	2" XT-3ES
	1.25" LMP*	3" LMP*	3" LMP*	4" LMP*
Crimp Force (kN/Ton)	900 / 90	2000 / 200	2000 / 200	2800 / 280
Part numbers & power options**	508-7870 (1PH 110V 60Hz 8A)	508-7865 (12V DC 150A)	533-1146 (1PH 230V 50Hz 26,5A)	423-4361 (3PH 230/380-420V at 50Hz/15A and 230/380-480V at 60 Hz 8,5A)
	508-7871 (12V DC 15,8A)	508-7866 (24V DC 83A)	533-1147 (1PH 230V 60Hz 26A) Universal table assembly 358-4545 (ordered separately)	
	508-7872 (1PH 230V 50/60Hz 4A)	508-7867 (1PH 230V 50/60Hz 7,8 A (50 Hz) 5,4 A (60Hz))	533-1148 (3PH 220/380V 50/60 Hz and 220/380-480V 60Hz 9,7A)	
		508-7868 (1PH 115V 50/60Hz 15,5 A (50 Hz) / 10,8 A (60Hz))		
Die kit (ordered separately)	508-7873	526-5493	526-5493	526-5494
Dimensions	450x450x450mm	508x432x533mm	1000x600x700mm	1600x610x1600mm
	18x18x18in	20x17x21in	39x24x28in	63X24X63in
Weight	41kg/90lbs	172kg/380lbs	261kg/575lbs	750kg/1650lbs
Target application	Entry level DIM*** customers Portable applications Service tech van	Advanced DIM** customers Mobile hose van Low volume workshop	Professional workshop	Large mining machines High volume production
Control	Micrometer controlled machine (manual, no computer)	Micrometer controlled machine (manual, no computer)	Crimputer controller with Cat proprietary software to ensure accurate tolerances are met on each crimp	Crimputer controller with Cat proprietary software to ensure accurate tolerances are met on each crimp

*LMP = Low & Medium Pressure Hoses – e.g. 294, 716, 844, etc.

**Full load amperage shown in table

***DIM = Do It Myself customer

Please refer to Dealer Service Tools Catalog PERJ1017 for detailed technical information

CAT HOSE SAWS



Cat Hose Saws are used to cut all hose types. The solid steel friction blade used in the Cat EM range of hose saws provides cleaner operation and reduced need for fume extraction* compared to alternative abrasive wheel hose saws.

Cat Hose Saws can have two configurations: the long lasting steel grooved blade, TM G (standard), or the advanced TM C blade (optional)– a specially coated blade, that produces a precise straight cut leading to a considerable reduction in contaminants and smoke.

IMPORTANT NOTE

All saws except EM115 are designed for on/off use and not designed to run continuously. Cat still offers the abrasive bladed hose saw, part numbers 6V-6015 or 250-6807. This model can cut the full Cat hose product line. Please refer to the Cat Hose Products and Tooling Guide, PECP5030 for more information.





	EM3-E	EM3-DC	EM6-E
Part Number	516-9368 (1PH 230V 8A)	517-2531 (12V DC 200A) 517-2534 (24V DC 115A)	508-7861 (1PH 110V 50/60Hz 15A) 508-7862 (1PH 230V 50/60Hz 9,6A)
Dimensions	400x510x540mm 16x20x21in	470x567x365mm 19x22x14in	510x700x720mm 20x28x28in
Weight	20kg/44lb	29kg/64lb	45kg/99lb
Target application	Entry level / DIM	Entry level / DIM Service van	Advanced DIM / Workshop
Best match with	S2 hose crimper	S2 hose crimper	M6 and/or S6

CUTTING CAPABILITY**

XT-5/XT-6	1" XT-5/6ES	1" XT-5/6ES	1.5" XT-5/6ES
XT-3	1.25" XT-3ES	1.25" XT-3ES	2" XT-3ES
Industry	1.25" LMP	1.25" LMP	2" LMP
TM G blade	517-2535	517-2532	517-2541
TM C blade	517-2536	517-2533	517-2542



	EM6-M	EM6-P***	EM115***
Part Number	517-2539 (3PH 400V 50Hz 9,5A) 516-9369 (3PH 220V 50/60Hz 15A)	517-2540 (3PH 400V 50Hz 9,5A) 516-9370 (3PH 220V 50/60Hz 15A)	444-5974 (3PH 230/380-420V 50Hz/26A and 230/380-480V 60Hz/15A)
Dimensions	700x745x430mm 28x29x17in	785x760x710mm 31x30x28in	1210x650x1650mm 48x26x65in
Weight	75kg/165lb	100kg/242lb	245kg/540lb
Target application	Advanced DIM / Workshop	Advanced DIM / Workshop	Large mining machines High volume production
Best match with	M6 and/or S6	M6 and/or S6	CPC325

CUTTING CAPABILITY**

XT-5/XT-6	1.5" XT-5/6ES	1.5" XT-5/6ES	2" XT-5/6ES
XT-3	2" XT-3ES	2" XT-3ES	2" XT-3ES
Industry	3" LMP	3" LMP	3" LMP
TM G blade	517-2537	517-2537	533-1165
TM C blade	517-2538	517-2538	533-1167

*A fume extraction / spark arrestor 533-1184 is recommended. **The cutting capability ratings for all models except the EM 115 are intended for shop application settings. If using the saw in a production application setting, the capability ratings on larger diameter spiral hose type decreases. ***Pneumatic guard operation for added safety operation – requires minimum 90psi / 621kPa with adequate flow. Please refer to Dealer Service Tools Catalog PERJ1017 for detailed technical information

Caterpillar offers a range of additional tools required to complement any hose assembly workshop. Below is an overview on the most common items.

CAT COMPLEMENTARY HOSE ASSEMBLY TOOLING



HOSE CLEANING GROUPS



233-7191

- Economy version
- Works on 4 mm (0.16 in) through 32 mm (1-1/4 in) or -03 through -20 hoses
- Includes carrying case with foam inserts
- Best for Mobile/Field Service Van



233-7192

- Portable version
- Works on 4 mm (0.16 in) through 32 mm (1-1/4 in) or -03 through -20 hoses
- Optional nozzles available for use to 50 mm (2 in) or -32 hoses
- Best for Mobile/Field Service Van



233-7193

- Professional Workshop version
- Works on 4 mm (0.16 in) through 50 mm (2 in) or -03 through -32 hoses
- Includes stand for projectile launcher and nozzle rack
- Designed for dealer workshops

HOSE LABEL PRINTERS



442-0077

- Low Volume production
- PC-connected or stand alone mode
- Universal Power Supply
- Ideal for making individual part number labels



442-0078

- High Volume production
- PC-connected or standalone mode
- LCD display
- Universal Power Supply
- Ideal for making multiple labels for the same part number





CLEAN SEAL END CAPPING



417-1322

- Hand held version
- Hex sizes from 12 mm (1/2 in) – 78 mm (3 in)
- Includes heat gun with case, flex vacuum pump stand and 95 mm diffuser for 1.5" connection
- Starter/Mobile solutions
- Weight 3.1 kg (6.9 lb)



417-1321

- Ready for 24/7 operations
- CE marked, European plug only
- Accepts clean seal capsules from 20 mm (1 in) – 80 mm (3 in) (ordered separately)
- Hex sizes from 12 mm (1/2 in) – 78 mm (3 in)
- Best for Professional Workshops
- Weight 11.8 kg (26 lbs)

NOTE

Please refer to Dealer Service Tools Catalog PERJ1017 for detailed technical information.

HAND TOOLS



8T-0450

Thread Measurement Kit

- Allows for measurement and identification of coupling
- Includes Coupling Identification Guide
- Recommended for all dealer hose assembly areas



266-7533

Large-Bore Protractor

- 2 size options – Standard & Large bore hose
- Used for coupling orientation



Skiving Vice

- Allows for easy skiving of hose
- Blocks have rubber pads to prevent damage to hose
- 127-1909 Vice
- 127-1910 Block group



7S-1126 Hand skiving tool

Skives DIN, XT-3 ES, XT-5, XT-6/ES hoses

CAT XT REUSABLE HOSE PRESS



Cat XT Reusable Couplings can be reused time and time again – there is no need to purchase a new coupling each time a hose is replaced. And there is no specific limit to the number of times a coupling can be reused. The Cat Special Reusable Hose Press delivers easy operation and high productivity.

Press specs: 50/60Hz, 1 phase
Size: 520mm x 1080mm x 1200mm
Pressure rated: 1,280 Bar
Estimated weight: 453kg/998lb
508-7863 – 115V
540-1208 – 230V



WHERE AND WHEN TO USE.

Mining, large constructions, extreme environmental conditions, heavy duty applications. Designed for sizes one inch and larger high pressure spiral hose, Cat XT Reusable Hose Press is the right choice if hoses are frequently replaced due to extreme working conditions. Where the going gets tough, your press keeps you going.



KEEP IT

There is **no need to purchase a new coupling each time a hose is replaced**. And there is no specific limit to the number of times a coupling can be reused



SAVE TIME

With Cat Reusable Couplings, **a ready inventory is always available** and immediate restock occurs at the time of reclamation, leading to **reduced machine downtime**



GUARANTEED

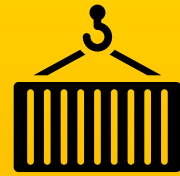
Cat Reusable Couplings for XT™ Hose are guaranteed against failure – or they are replaced free of charge



SAVE MONEY

Each time save 30% or more off the cost of assemblies with permanent couplings

ON-SITE SOLUTIONS



FAST. CONVENIENT. DEPENDABLE.

- Designed to be placed directly at your job site
- Ideal for mine sites, large construction projects, or remote locations
- Essential where speed of service is required
- Engineered to the highest Caterpillar standards
- Fully equipped, turnkey solution, to help get your equipment back to work

FULLY EQUIPPED AND CONFIGURABLE FOR YOUR NEEDS.

Available in different sizes and configurations designed to fit various job sites. Please contact your dealer representative to discuss your specific needs.

522-7321

Length 6.5m (20ft.)

Width 2.3m (8ft.)

Height 2.3m (8ft.)

453-8588

Length 13m (40ft.)

Width 2.3m (8ft.)

Height 2.3m (8ft.)

453-8589

Length 13m (40ft.)

Width 4.6m (16ft.)

Height 2.3m (8ft.)

BENEFITS.

- ✓ Fully insulated with integrated **climate control system**. Designed to provide a comfortable work environment in temperatures ranging from -20C (-4F) to 48C (118F).
- ✓ **Integrated exhaust** for increased air quality
- ✓ Country **compliant electrical and lighting** systems
- ✓ **Highly durable** work surfaces
- ✓ Unmatched hardware & software solution that ensures **hose assemblies are built exact to OEM specs**



CAT HOSE ASSEMBLY PRESSURE TEST EQUIPMENT



The Cat Hose Assembly Pressure Test Equipment is designed to ensure a safe, reliable hose has been built and is ready for installation. The Cat Hose Pressure Test Equipment was designed to comply with the most strict safety standards available, such as MDG 41 Mine Site Guidelines.

Cat Hose Assembly Pressure Test Equipment can operate as a stand-alone machine and it can also be integrated with the Cat Hose Crimper and Label Printer to maintain hose build and pressure test data for historical records and improved hose business management. System features include:

- User identification through login and password
- User-guiding software for improved operation
- Creation of Certification number that is comprised of Facility Location, Work Order Number, Hose Part Number, Batch Count and Date Code
- Detailed hose label auto print
- The Crimputer or Test Bench datalog can be downloaded at anytime via USB and then uploaded for safe, accurate record keeping.



Standard solution requires manual download of data memory for complete record keeping and hose business management. A networked integration set-up option is also available.

This solution is ideal for hose shops with multiple hose crimpers and is available upon request. Please contact your local ASR or ASC for more information.

PART NUMBERS	DESCRIPTION	WEIGHT (KG)	OVERALL DIMENSIONS (MM)
528-5351	Test Bench Control Stand	210	850 x 1390 x 810
528-5347	P160 Cabinet	200	2210 x 950 x 1325
528-5349	P160 Cabinet with Extension	390	4100 x 950 x 1325
528-5350	P350 Cabinet	650	2100 x 2170 x 2650
528-5354	Adapter Kit	85	800 x 600 x 670
528-5353	CV Crimper. Required for implementation of Integration Software	4	250 x 200 x 50
528-5352	Barcode Scanner. Recommended for use with Integration Software		

PACKAGES	
528-5359	P160 Test Bench (includes P160 cabinet, control stand, adapter kit)
528-5360	P160 Test Bench w/ Extension Cabinet (includes P160 cabinet with extension, control stand, adapter kit)
528-5361	P350 Test Bench (includes P350 cabinet, control stand, adapter kit)

NOTE

Please refer to Dealer Service Tools Catalog PERJ1017 for detailed technical information.



P160 EXTENSION



CONTROL STAND



P350 CABINET

Want to launch your own hose manufacturing and not sure how to match up a crimper, cutter, cleaning group, and printer?

HAVE A NEED? WE HAVE A SOLUTION!



STEP 1

SELECT YOUR TOOLING

Choose from one of our recommended tooling packages below or build your own from our Hose Assembly Tooling range

STEP 2

STOCK INVENTORY PROFILE

Provide us with your equipment fleet and we will tailor a Hose & Coupling stocking package for your needs

STEP 3

ASSEMBLER TRAINING

Our Dealers offer Hose Assembler Training to ensure correct parts selection and assembly for the safest connection



BRONZE

Our Basic offering, ideal for start-up Do It Myself (DIM) customers. With a crimping capability of up to 1.25", this package will cover all your basic requirements and can be easily transported to your job site.

IDEAL FOR STARTUP DIM CUSTOMERS



SILVER

Our Advanced offering for DIM customers. Its increased crimping capability of up to 3" offers comprehensive coverage for your replacement hose assembly needs.

IDEAL FOR ADVANCED DIM CUSTOMERS AND MOBILE SOLUTIONS



GOLD

Our Professional offering. It includes a computer controlled hose press with guided menus for easy operation and set up. Final crimp specifications are recorded for added safety and traceability. Crimping capability up to 3".

IDEAL FOR DEALER BRANCH STORES



PLATINUM

Our Full Service offering. With a crimping capability up to 4", this is ideal if you're servicing large mining equipment or producing a large volume of hose assemblies. You'll also benefit from full Cat Crimper Control with the Platinum package.

IDEAL FOR LARGE MINING AND HIGH VOLUME CUSTOMERS



NOTE

Package items have to be ordered separately

RELIABILITY AND PERFORMANCE BUILT IN

Cat Hose & Coupling Solutions offer unrivaled reliability and performance because they're designed and built as a complete system, tested beyond industry standards and supported by expert services.

Contact Carter Machinery to learn more. Keeping your machines working reliably for longer: that's what Cat hose and couplings are built to deliver.

Carter



**LET'S GET
TO WORK.**