cengar®

ATEX APPROVED

AIR SAWS FOR THE PROFESSIONAL

CS75

operating instructions

MADE IN BRITAIN

WHO WE ARE

Professionals in many Industries have relied on Cengar products for reliability, low maintenance and operator safety for decades. Our Cengar Air Saws are used Worldwide in many industries, where our quality saws are relied upon and trusted for their cutting performance. Since 2016 our Pallet Spreader has become the pallet repairer's number one choice for helping to repair and recycle used pallets. We are proud that we can help sustainability and the environment. More recently Cengar has added impact sockets to its portfolio, we are able to manufacture high-quality impact sockets for use on pneumatic, hydraulic, petrol and battery Impact Wrenches.

CENGAR AIR SAW MODEL CS75

We recommend normal safe working practices should be followed as per the Health and Safety at Work Act, or the appropriate National and State Laws. We recommend that eye and ear protection be worn when using Cengar Saws.

SPECIFICATIONS	
Speed	1200 strokes per minute
Stroke	45mm
Air Compsumption	0.168m^3/minute
Air Pressure	5-6 Bar
Weight	2.5Kgs
Length	400mm
Height	135mm
Width	40.6mm
Vibration Level Averaged	3.2m/s^2
Sound Pressure Level	82.9db
Sound Power Level	92.4db
Atex Certification	Ex II 2G Ex h IIC T3 Gb

Each machine is marked with a serial number, which contains the year and month of construction, along with an identifier number.

Serial number example:

Identifier number — 20 15 10 — Month of construction

Year of construction

UK DECLARATION OF CONFORMITY

We the undersigned, declare under our sole responsibility that the following apparatus:

Machine Description	Cengar Air Saw
Machine Type	CS75

Is in conformity with the following relevant UK legislation:

Supply of Machinery (Safety) Regulations 2008 (as amended)	
UKEX Regulations	SI 2016:1107

Based on the following Harmonised Standards:

EN ISO 4414:2010 EN ISO 80079-36:2016
EN ISO 80079-37:2016 EN 60079-0:2018

And therefore complies with the essential requirements of those directives.

The following ignition hazards have been identified when the equipment is in use, hot surfaces, mechanical sparks, electrostatic charging. These are mitigated as the equipment was designed to meet the requirements of protection concept constructional safety "c".

ADDITIONAL INFORMATION

UKEX coding	Ex II 2G Ex h IIC T3 Gb
Approved Body (UKEX holding technical file)	Element Materials Technology Warwick Ltd Unit 1, Pendle Place, Skelmersdale, West Lancashire WN8 9PN, United Kingdom.
Identification Number	0891
Certificate No.	EMA21UKEX0011X
Authorised Signature	S. Sha
Date	10/05/2021
Title of Signatory	Commercial Manager - Cengar Ltd. Springfield Works, Saddleworth Road, Greetland, Halifax HX4 8LZ
Special Conditions of Safe Use (on the certificate)	1. Suitably approved static dissipating or conductive air hose only to be attached to the equipment and terminated to the air supply. 2. Operator to ensure that there is less than 1 Ohm resistance between the ground at the air source and any metallic object to be cut with the equipment. 3. The equipment shall be supplied from a clean air source in an area known to not contain a potentially explosive atmosphere. 4. A filter must be fitted to the supply compressor inlet to prevent dust airflow within the equipment. 5. To comply with UKEX certification regulations it is necessary to use Cengar branded Blades with Cengar Saws.

1. Under normal working conditions can be used in a Zone 1 environment.
2. Classification based on tests cutting a selection of steels & composite materials (MB, MC, Yellow, JSZ) Blades.

EU DECLARATION OF CONFORMITY

We the undersigned, declare under our sole responsibility that the following apparatus:

Machine Description	Cengar Air Saw
Machine Type	CS75

Is in conformity with the following relevant EC legislation:

Machinery Directive	2023/1230
Atex Directive	2014/34/EU

Based on the following Harmonised Standards:

EN ISO 4414:2010 EN ISO 80079-36:2016
EN ISO 80079-37:2016 EN 60079-0:2018

And therefore complies with the essential requirements of those directives.

The following ignition hazards have been identified when the equipment is in use, hot surfaces, mechanical sparks, electrostatic charging. These are mitigated as the equipment was designed to meet the requirements of protection concept constructional safety "c".

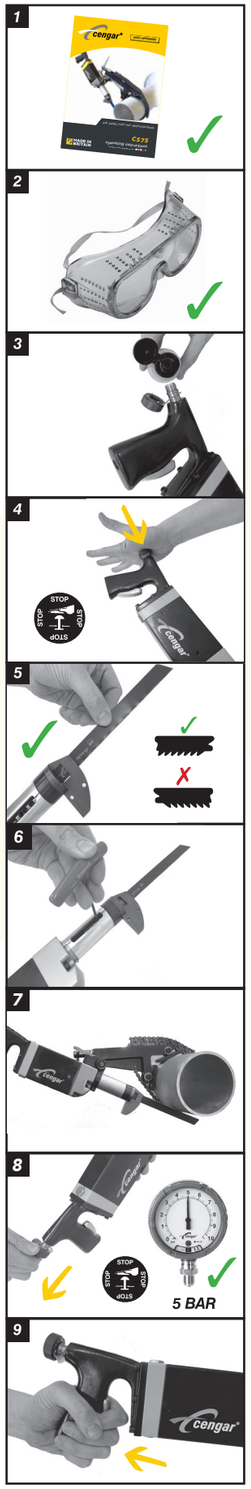
ADDITIONAL INFORMATION

ATEX Coding	Ex II 2G Ex h IIC T3 Gb
Notified Body (Atex holding technical file)	Element Materials Technology Rotterdam B.V. Voorerf 18, 4824 GN Breda, Netherlands
Identification Number	2812
Certificate No.	EMT18ATEX 0032X
Authorised Signature	S. Sha
Date	06/02/2020
Title of Signatory	Commercial Manager - Cengar Ltd. Springfield Works, Saddleworth Road, Greetland, Halifax HX4 8LZ
Special Conditions of Safe Use (on the certificate)	1. Suitably approved static dissipating or conductive air hose only to be attached to the equipment and terminated to the air supply. 2. Operator to ensure that there is less than 1 Ohm resistance between the ground at the air source and any metallic object to be cut with the equipment. 3. The equipment shall be supplied from a clean air source in an area known to not contain a potentially explosive atmosphere. 4. A filter must be fitted to the supply compressor inlet to prevent dust airflow within the equipment. 5. To comply with ATEX certification regulations it is necessary to use Cengar branded Blades with Cengar Saws.

1. Under normal working conditions can be used in a Zone 1 environment.
2. Classification based on tests cutting a selection of steels & composite materials (MB, MC, Yellow, JSZ) Blades

cengar®

INSTRUCTIONS



1. Always read the instructions.

2. Always wear safety glasses.

3. Unscrew oil cap and fill with Cengar Green Oil. Replace cap.

4. Isolate air supply before fitting blade by pushing stop button in.

5. Fit the blade with the teeth facing the machine. Avoid handling the blade teeth.

6. Secure blade by tightening both grip screws with supplied T key.

7. To use saw clamp mounted please refer to page 6

8. Connect to a 5-6 bar air supply and pull out stop button

9. Press trigger and apply light downward pressure.

Please refer to page 10 for the correct blade selection

DO'S & DON'TS

1. ALWAYS use Cengar green oil for best results. Keeping the saw clean and well oiled will give excellent reliability, and a long life.

2. ALWAYS use Cengar Bi-Metal Shatterproof blades, for safety, and best cutting performance.

3. ALWAYS isolate the air supply when changing blades.

4. ALWAYS wear eye protection when using saws.

5. ALWAYS keep the nosepiece hard against the work piece to prevent excessive vibration.

6. ALWAYS isolate the machine when not in use.

7. ALWAYS keep others away from the saw blade to prevent injury or trapping.

8. ALWAYS have machines vibration tested annually to ensure exposure is kept to the minimum.

1. NEVER fit breakable "All-Hard" blades in Cengar saws, these can shatter causing injury to the operator and others.

2. NEVER operate saw without wearing safety glasses.

3. NEVER operate saw whilst you, or others are near the saw blade, which can cause serious injury or trapping.

4. NEVER use excessive force because this may increase vibration above safe levels.

5. NEVER hold the Cengar saw in a vice by the body. This will distort the bores, rendering the tool inoperative.

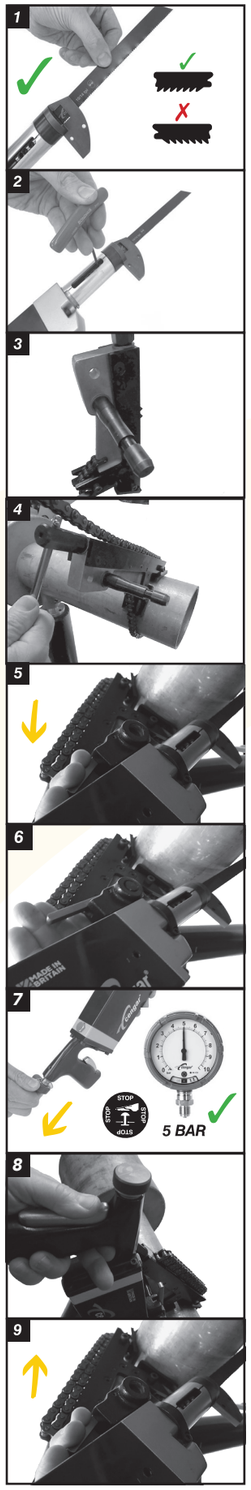
6. NEVER screw nameplates to the body, as the screws may penetrate an airway or bore.

7. NEVER operate the Cengar saw without lubrication.

8. NEVER be tempted to clean internal parts with anything other than a clean lint free cloth or Cengar Green oil.

9. NEVER modify Cengar saws or use non Cengar parts. This will invalidate ATEX approval and warranty.

CS INSTRUCTIONS USING THE PIPE CLAMP



1. When using the pipe clamp fit the blade into the machine with the teeth facing upwards and towards the machine. Avoid handling the blade teeth.

2. Secure blade by tightening both grip screws with supplied T key.

3. Fit the spigot (CP1/3) into the appropriate side of the clamp in the front of the two holes in the clamp body and tighten securing nut.

4. Position the clamp on the pipe with the chain around the pipe and tighten using the tommy bar (end of CP1/6). Ensure the clamp is perpendicular to the pipe for an accurate cut (Fig.1).

5. Mount the machine onto the spigot whilst pressing down the carrier latch. Slide the machine into the groove in the spigot. Ensure it is correctly located.

6. When mounted correctly the blade should be under the pipe so that the weight of the machine applies the cutting force to the blade. (Fig.2).

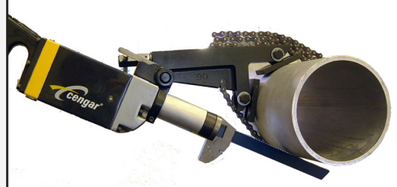
7. Attach air supply (5-6 bar).

8. Press the trigger to start the machine and lock trigger in place by sliding the trigger downwards. Gently bring the blade into contact with the work gradually release the weight of the machine to allow the cut to take place with out extra force.

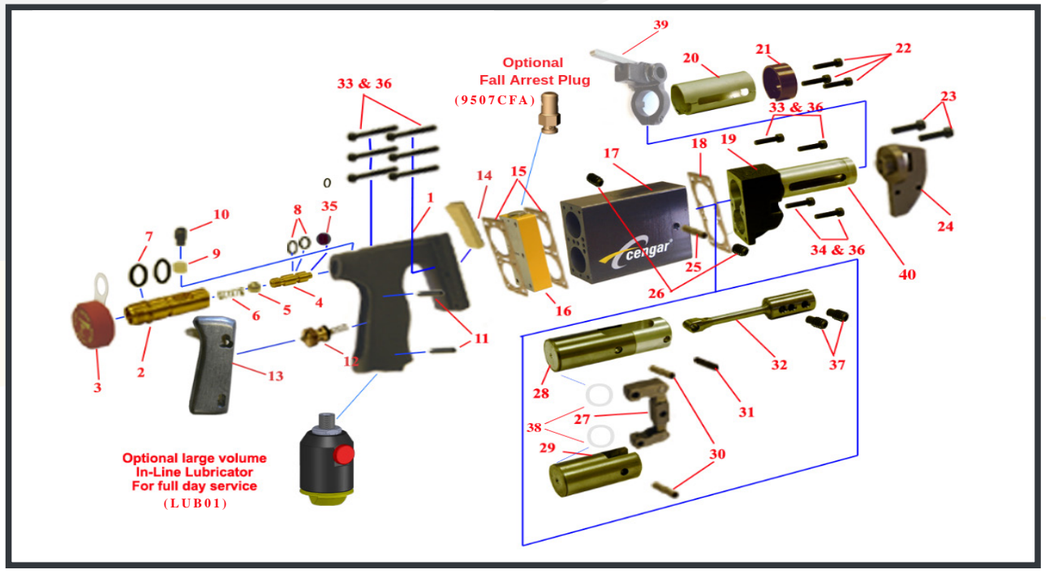
9. When the cut is complete release slide the trigger upwards and release the trigger. Remove air supply before attempting to remove machine from spigot (reverse of 5 above).

FIGURE 1

FIGURE 2



CS75 EXPLODED VIEW



ITEM	PART NO.	DESCRIPTION	NUMBER PER TOOL	ITEM	PART NO.	DESCRIPTION	NUMBER PER TOOL
1	9550	Handle	1	21	1143A	Front End Cap	1
2	9554	Isolator body	1	22	54160	Front Cap Screws	3
3	9553	Oil Cap & Retainer	1	23	54160	Screws - Nosepiece	2
4	9555	Isolator Nozzle	1	24	5075	Nosepiece (3/4")	1
5	9559	Oil Control Ball	1	25	1147	Centre Shaft	1
6	9334A	Spring	1	26	55516	Screws for above	2
7	9561	'O' Ring Large	2	27	1150	Link to Pistons	1
8	9560	'O' Ring Small	2	28	1248	Top Piston	1
9	9557	Détente Spring	1	29	1252	Bottom Piston	1
10	9556A	Lock Screw	1	30	1147	Pin to Link	2
2to10	9552	Isolator Assembly		31	1147	Pin to Pedestal	1
11	51834	Roll Pin-Trigger	2	32	1153-5	Pedestal	1
12	50034	Valve in Handle	1	33	5540	Screw-Handle Front	8
13	9502	Trigger	1	34	5520	Screw-Front Lower	2
14	9506	Filter/Gauze	1	35	9564	Isolator Seal	1
15	9538	Gasket	2	36	W55	Serrated Washer	10
16	9507	Valve Unit	1	37	5068	Screw-Blade Grip	2
17	1241L	Body	1	38	9510	Piston Seal	2
18	1142	Gasket-Front End	1	39	CR1	Carrier for Clamp	1
19	1243	Front End Complete	1	40	-	Serial Number-	
20	SG1	Silencer Guard					

CENGAR BLADE SELECTION FOR CUTTING SOLID MATERIAL

AVAILABLE BLADE PITCHES

Thickness (mm)	24 TPI	18 TPI	14 TPI	10-14 TPI Varipitch	8 TPI
2	2	1	1	1	1
5	5	4	3	2	2
10	9	7	6	5	3
15	14	11	8	7	5
20	19	14	11	9	6
25	24	18	14	12	8
30	28	21	17	14	9
35	33	25	19	17	11
40	38	28	22	19	13
45	43	32	25	21	14
50	47	35	28	24	16
55	52	39	30	26	17
60	57	43	33	28	19
65	61	46	36	31	20
70	66	50	39	33	22
75	71	53	41	35	24

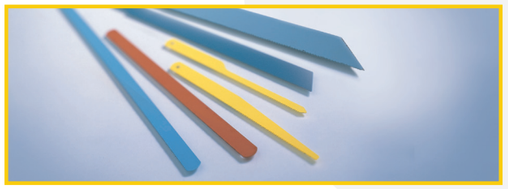
The numbers in the coloured boxes indicates the *actual* number of teeth which will be in contact with the work

BLADE SELECTION

Pipe Diameter (mm)	CS75 on clamp
50	200mm blade
100	250mm blade
150	300mm blade

CS75 HEAVY STEEL SECTIONS UPTO 150MM DIA USING 19MM (3/4") WIDE SHATTERPROOF BLADES

Type	Length mm	TPI
MB Blue for various steels	150, 200, 250	10/14, 18, 24
MB Blue for various steels	300	10/14, 14, 18
MBSS Silver for stainless steels	250, 300	18



GENERAL RULE:

- No less that 3 teeth in contact
- Ideally between 6 and 12 teeth in contact
- No more than 24 teeth in contact

Visit our website www.cengar.com to view our range of blades, clamps and accessories.

ADDITIONAL CENGAR SAWS AVAILABLE

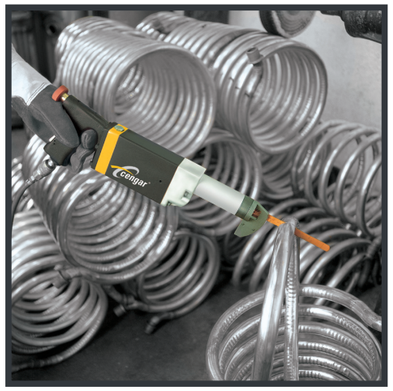
PL905

Steel Sections Bolts, Gratings etc. up to 6mm thick and 25mm Composites.

JP901

Thin metal up to 3mm and GRP to 6mm thick.

CL75



High Quality Steel Pipe up to 150mm dia and similar size sections.

JSZ

Steel Pipe up to 300mm dia and similar size sections.

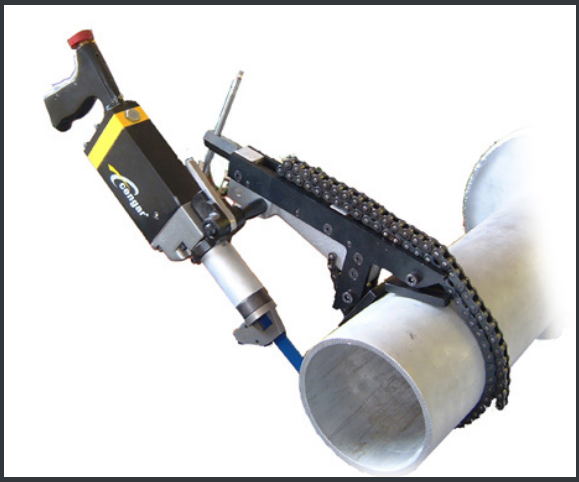
SERVICE

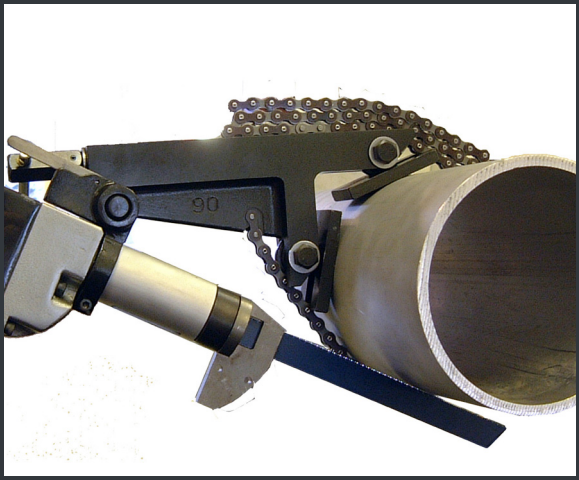
We offer a full factory repair and refurbishment service for Cengar Saws, normally within 5 working days. Quotations at no charge can be given before work is carried out.

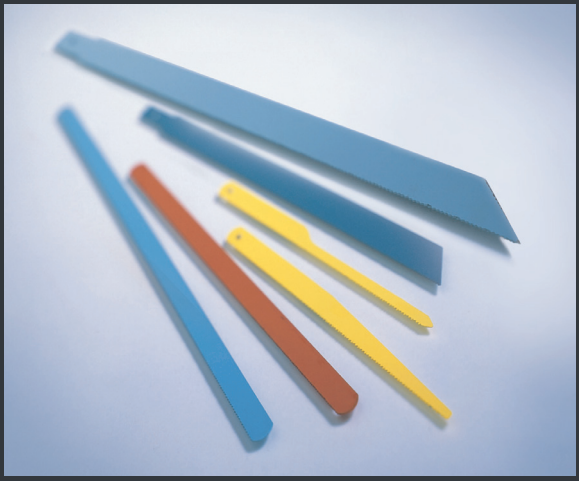
DISTRIBUTOR ADDRESS

Cengar Ltd.
Springfield Works,
Saddleworth Road,
Greetland, Halifax,
England HX4 8LZ

Tel: 01422 377904
Fax: 01422 377161
enquiries@cengar.com
www.cengar.com







Original Instructions Document No. MANCS75ENG/01 Issue 14 (June 26)