



KALLER[®]



Machine & Vehicles

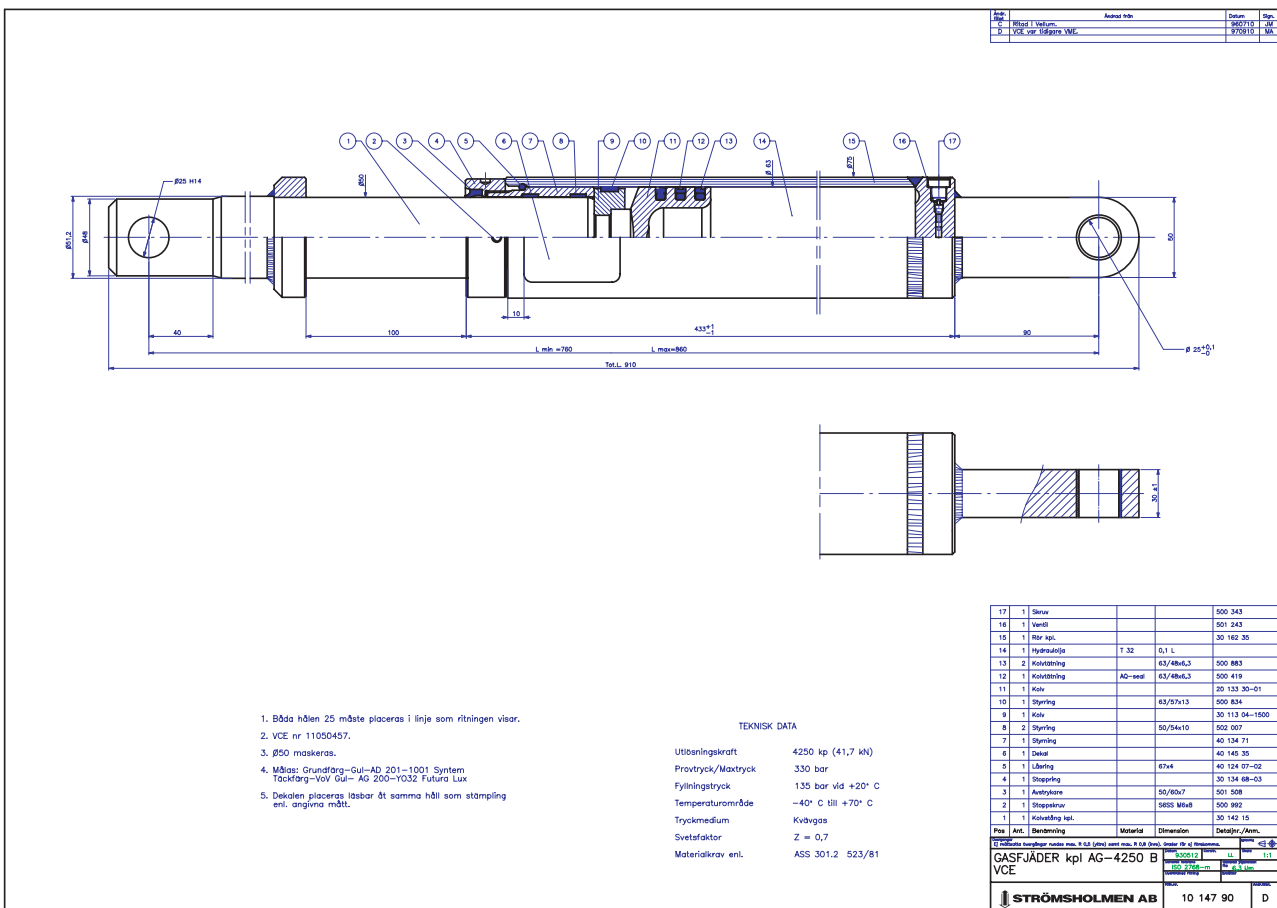
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KALLER Products for Machine & Vecicles

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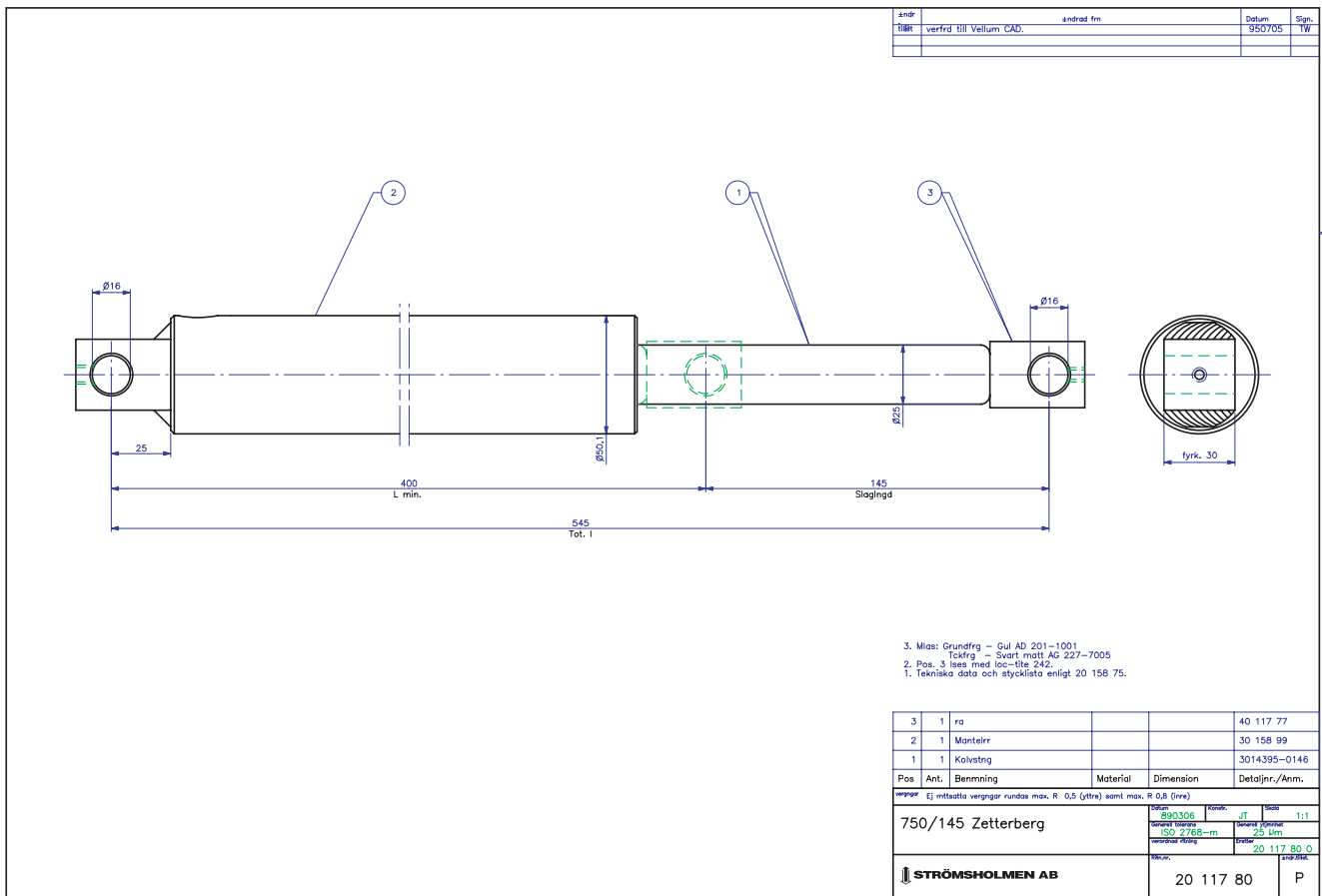
Volvo Articulated Hauler (VCE) and MOXY truck

This gas spring sits beneath the bucket part of the dumper within the hinge assembly. If an obstruction (a large stone for example) prevents the rear shutter from closing, then the linkage containing the gas spring will take up the force and remaining movement of the linkage.



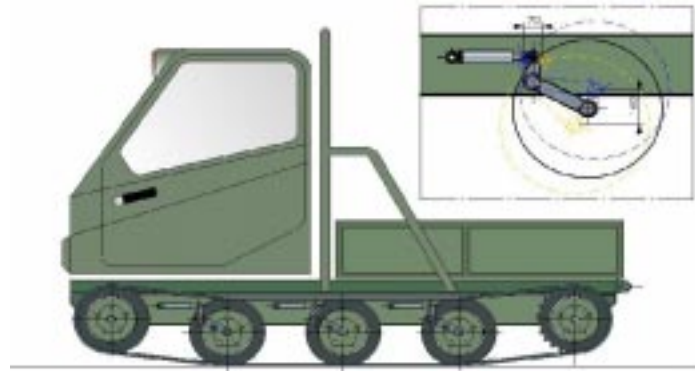
Zetterbergs Mekaniska “rear shutter”

Here gas springs are used to provide the force required to close the rear shutter after it has been opened.



Snow-mobile "suspension"

This application uses gas springs in the linkage with the swinging arm of the suspension of a track laying vehicle used for off road purposes.



Ändr. / Not.	Ändrad från		Datum	Sign.
I	Det.nnr. 22 139 70 och 23 139 70 Inf. Not. 3 var not. 1.		951115	TB
J	Modell 24 och not. 4 inf.		990924	PW

24 139 70	30 143 95	31 153 70	30 117 15-06	503 520 (835/20)	503 521	Kromad kolstäng, underhållsfria ledlager	20
23 139 70	30 163 21	30 153 70	30 117 15-01	502 677 (830/17)	500 707	Kväll kolstäng, underhållsfria ledlager	17
22 139 70	30 163 01	30 153 70	30 117 15-01	501 660 (830/17)	500 707	Kväll kolstäng, ständard ledlager	17
21 139 70	30 143 95	30 153 70	30 117 15-01	502 677 (830/17)	500 707	Kromad kolstäng, underhållsfria ledlager	17
20 139 70	30 143 95	30 153 70	30 117 15-01	501 660 (830/17)	500 707	Kromad kolstäng, ständard ledlager	17
Detalnummer	Kolvstäng, pos.1	Rör, pos.2	Öra, pos.3	Ledlager, pos.4	Segerring, pos.5	Anmärkning	BA

Zx 139 70 - 3000	300	445	745	Se tabell - 3000	3x 153 70 - 3000
- 2500	250	395	645	- 2500	- 2500
- 2000	200	345	545	- 2000	- 2000
- 1600	160	305	465	- 1600	- 1600
- 1250	125	270	395	- 1250	- 1250
- 1000	100	245	345	- 1000	- 1000
- 800	80	225	305	- 800	- 800
- 635	63,5	208,5	272	- 635	- 635
- 500	50	195	245	- 500	- 500
- 381	38,1	183,1	231,2	- 381	- 381
- 250	25	170	195	- 250	- 250
Zx 139 70 - 0127	12,7	132,7	170,4	Se tabell - 0127	3x 153 70 - 0127
Detalnummer	Slagl. mm	L min	tot. L	Kolvstäng, pos. 1	Monterör, pos. 2

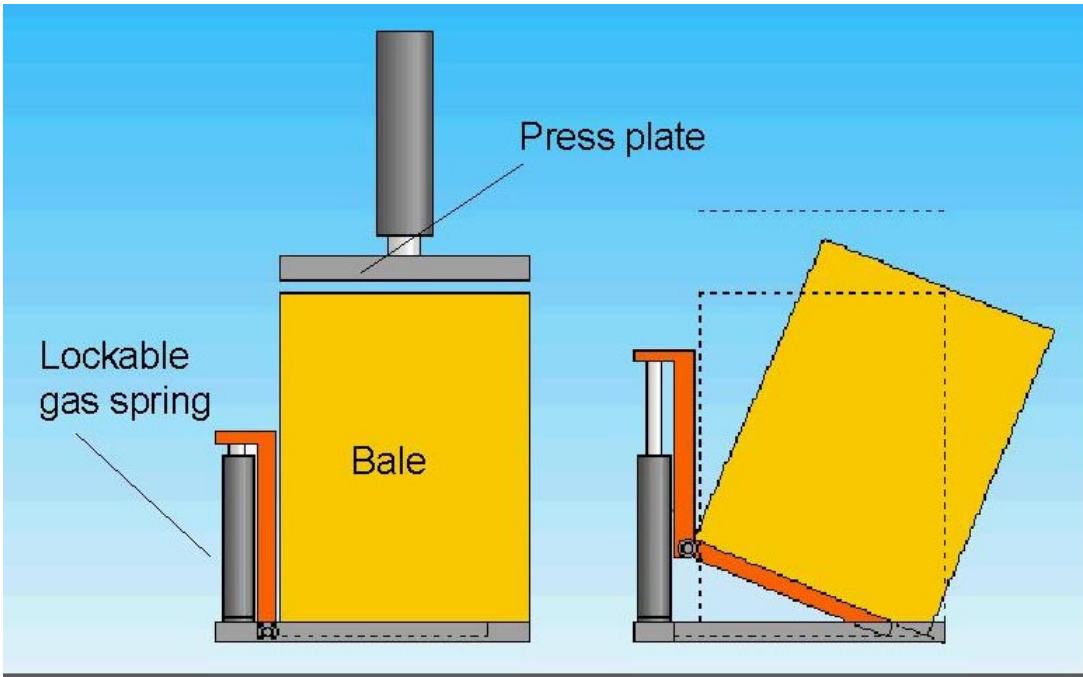
Pos.	Ant.	Benämning	Material	Dimension	Detalnr./Aem.
5	4	Segerring			Se tabell
4	2	Ledlager			Se tabell
3	2	Öra			Se tabell
2	1	Monterör kpl.			Se tabell
1	1	Kolvstäng			Se tabell

4. Ritning visar modell 20 139 70.
 3. Tekniska data och styckelista enligt 20 158 75.
 2. Mölås: Svart, Forsal Zkomp. 39000280-20.
 1. Pos. 3 köses med Loc-Tite 242.

Smst. TEBEB 750		
		2x 139 70
		J

Orwak “waste bale ejector”

This special gas spring is a lockable spring. The waste is filled in the machine with the gas spring locked in its lowest position. When the machine is full, the valve in the gas spring is opened allowing the piston rod to return to its extended position. This in turn ejects the bale from the machine.

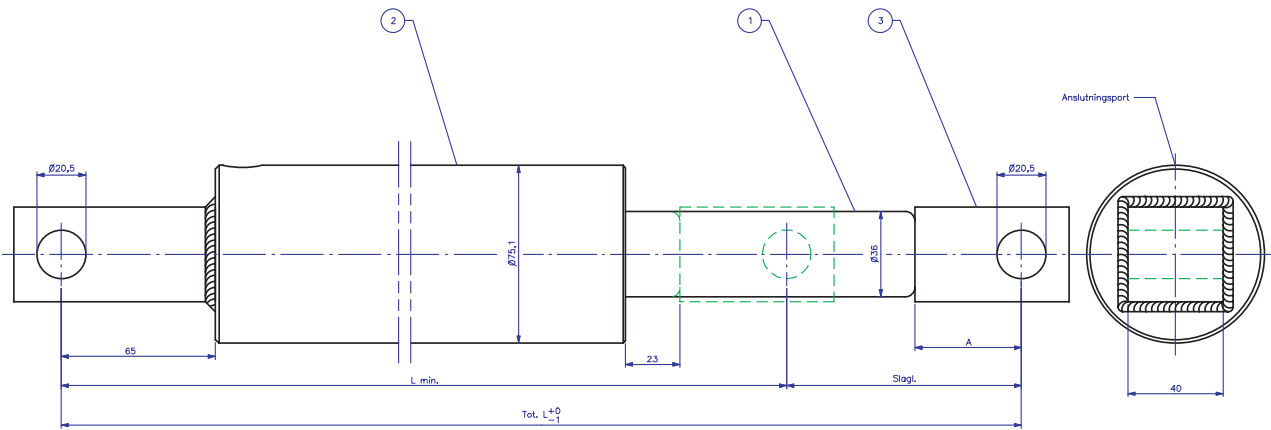


VM Trailer "vehicle ramp"

Here gas springs are used to give the return force required to lift up the ramps located at the back of the low loader vehicle trailer.



Ändr. stift.	Ändrad frn	Datum	Sign.
A	-04 inf. 23 var 3.	980933	JS
O	infört -05 och tabell med färgbeteckningar.	970626	RD
AA	Namn var HAFÖ.	970924	PW



- 4. Måttas: Se tabell.
- 3. Pos 3 löses med fac-löte 242.
- 2. Tekniska data och stycklistan enligt ritning 20 158 76.
- 1. OBS! Fylltryck 20 117 20-03; 100 bar, -04; 70 bar.

Detaljnr.	Måttas
20 177 20-05	Grundfång- Grön- KF 110-4002 Dynalon
20 177 20-04	
20 177 20-03	Grundfång- Gul- AD 201-1001
20 177 20-02	Täckfång- Svart- Bø 180- S013
20 177 20-01	

3	1	Öra			Se tabell
2	1	Mantelrör			Se tabell
1	1	Kolvstång			Se tabell
Pos	Ant.	Benämning	Material	Dimension	Detaljnr./Anm.
Ej införlagda övergångar rundas min. R 0,5 (ytta) samt max. R 0,8 (inre). Grader till 45. Hållfasthet: 600 N/mm ² . Se tekniska data och stycklistan enligt ritning 20 158 76.					
Smet. TUF 1500			ISO 2768-m	6,3 Um	
STRÖMSHOLMEN AB			20 117 20 Y	AA	

Detaljnummer	Slagl. mm	L min.	Tot. L	A	Pos. 1 Kolvstång	Pos. 2 Mantelrör	Pos. 3 Öra
20 117 20-05	330	545	875	20	30 162 49 - 3500	30 158 98 - 3300	40 87 99
20 117 20-04	330	545	875	20	30 162 49 - 3500	30 158 98 - 3300	40 87 99
20 117 20-03	400	640	1040	45	30 162 49 - 4250	30 158 98 - 4500	40 87 99
20 117 20-02	280	495	775	20	30 162 49 - 3000	30 158 98 - 2800	40 87 99
20 117 20-01	280	520	800	45	30 162 49 - 3000	30 158 98 - 2800	40 87 99

ABB “robotic-arm”

Gas springs fitted with manometers to monitor the gas filling pressure are located at the base of the robotic arm to compensate for turning moments created when lifting items outside the centre of gravity of the arm itself.

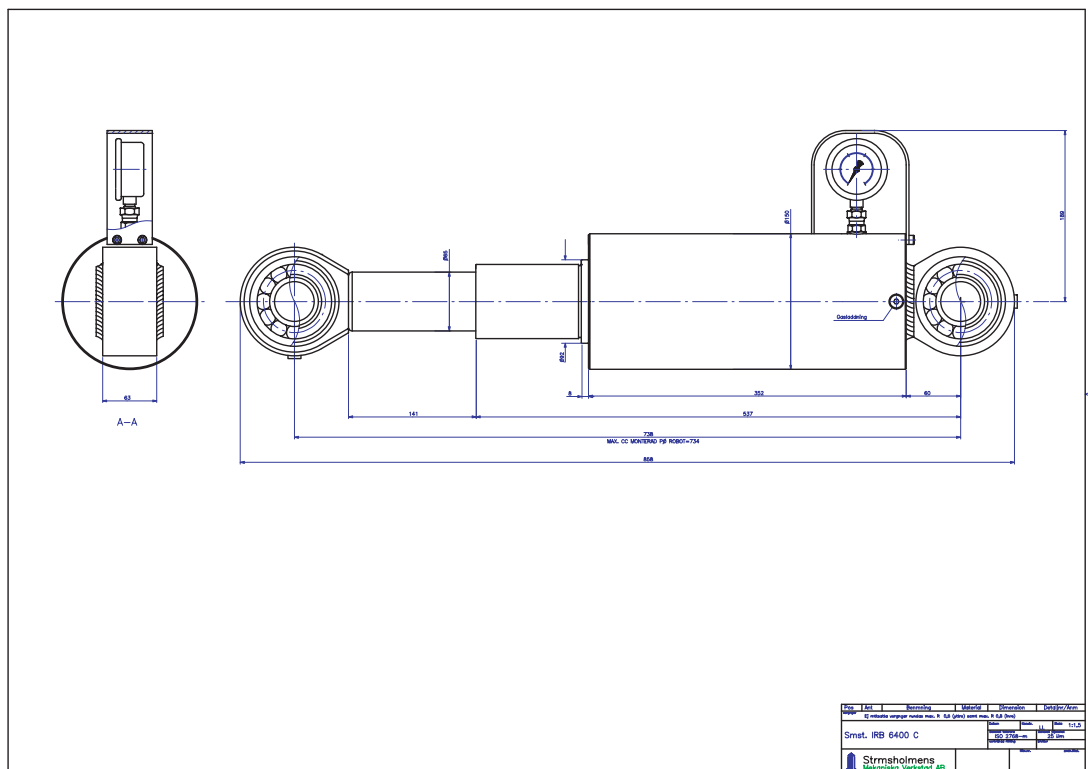
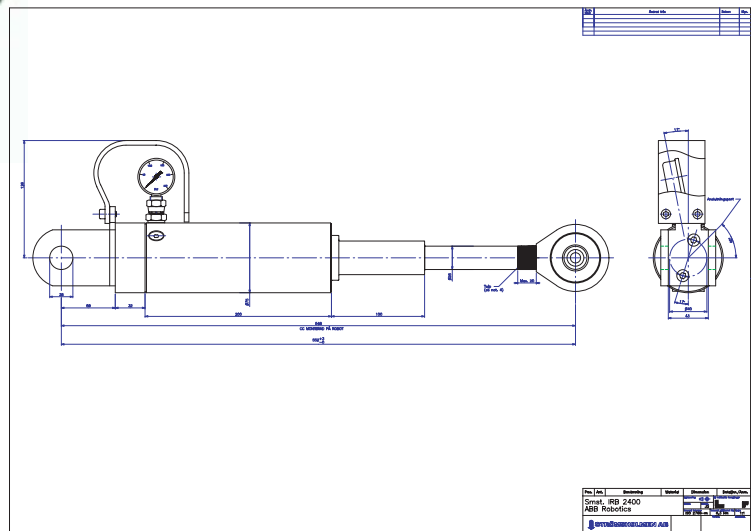
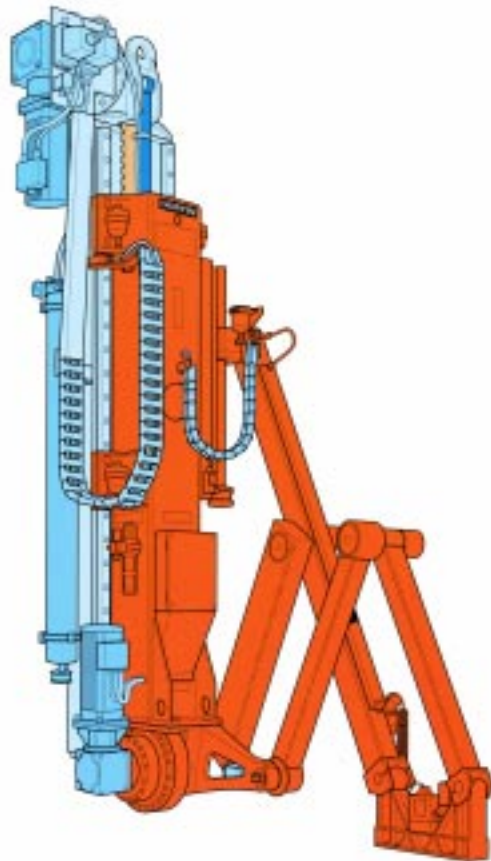


ABB "dopp-in feeder"

The dopp-in feeder moves in-out and up-down in a single plane. To compensate the weight of the vertically moveable part of the arm itself, hydraulic cylinders connected to accumulators are used.



FÜLLTRYCK VID 20°C
FÖRLADDNINGSTRYCK GAS 85 BAR.
FÜLLTRYCK OLJA 102 BAR.
FÜLLTRYCK, ARBETSTRYCK, GAS 102±2 BAR.

FÖRE MONTERING AV SYSTEMET SKALL SAMTLIGA
DETALJER VARA VÄL RENGJORDA.
SLANGEN RENBLÄSES OCH SPOLAS I
HYDRAULAGGREGAT.
ÅTDRAGNINGSMOMENT POS. 8 ÖVERDEL 10 Nm.
NÄR SYSTEMET LUFTAS SKALL AKKUMULATORN,
POS.1, LIGGA SÅ LÖFTNIPPELEN, POS. 8, ÄR
HÖGSTA PUNKTEN I SYSTEMET.
NÄR SYSTEMET LUFTATS OCH FYLTS MED OLJA
TILL RÄTT TRYCK, SKALL SAMTLIGA FÖRNINGAR,
ANSLUTNINGAR OCH ÖVRIGA PUNKTER DÄR RISK
FÖR LÄCKAGE FINNS VARA TORRA. SÅ EVENTUELLA
LÄCKAGE KÄN SPITÄCKAS LÄTTARE VID
LEVERANSTEST.
LEVERANSTEST ENLIGT 30 144 68.
EFTER LEVERANSTEST JUSTERAS GASTRYCKET FÖR
FLYSPRÅKT, 5-10 bar.

BERÄKNADE TRYCK VID DRIFT
BERÄKNINGSTEMP. 50 °C
LÄGSTA ARBETSTRYCK 121 BAR
HÖGSTA ARBETSTRYCK 172 BAR

CHARGING PRESSURE AT 20 °C
CHARGING PRESSURE NITROGEN 85 BAR.
CHARGING PRESSURE OIL 102 BAR.
CHARGING PRESSURE, WORKING PRESSURE,
NITROGEN 102±2 BAR.

ALL PARTS SHOULD BE WELL CLEANED BEFORE
ASSEMBLY.
THE HOSE SHOULD BE BLOWN OFF AND
WASHED IN A HYDRAULIC AGGREGATE.
TORQUE ON THE TOP OF POS. 8 10 Nm.
WHEN THE SYSTEM IS DRAINAGE OF AIR THE
ACCUMULATOR, POS.1, SHOULD BE PLACED SO
THE AIR-RELEASE VALVE, POS. 8, IS THE HIGHEST
POINT IN THE SYSTEM.
WHEN THE SYSTEM HAS BEEN DRAINED OF AIR
AND CHARGED WITH OIL TO RIGHT PRESSURE, ALL
CONNECTIONS AND OTHER DETAILS WHERE
LEAKAGE MAY OCCUR BE DRY, SO THAT ANY
EVENTUAL LEAKAGE IS EASY TO DISCOVER DURING
THE DELIVERY TEST.
DELIVERY TEST ACCORDING TO 30 144 68.
AFTER DELIVERY TEST THE GAS-PRESSURE IS
ADJUSTED FOR AIR FRAUGHT, 5-10 bar.

CALCULATED PRESSURE DURING RUN
CALCULATING TEMP. 50 °C
LOWEST PRESSURE 121 BAR
HIGHEST PRESSURE 172 BAR

Reh. 100

Stängning = 1200

Ø 102

Ø 80

Ø 120

1300

100

NITROGEN / N2

Blocket stämplas enligt ritning 40 144 63

1. Färgulor (efter måtning av ackumulator och cylinder, pos. 1 & 14):
Först 2st. 3000008-20 (svart)

Pos	Ant	Beskrivning	Mått	Material	Dimension	Drifttryck/Temp.
26	2	Drivaxel	Ø26x6	503 578		
25	1	Styck PM2D2	56x22	40 181 81		
24	52	Enkeltspår		502 565		
23	1	Delat osvartsmör	96x70	40 136 31		
22	3	Fästskivorna gummiöskad	Ø46x15	502 374		
21	3	Inneskruv M6x8	M6x20	502 310		
20	3	Fästskivorna gummiöskad	Ø20x15	502 375		
19	3	Skiva SFB	Ø14/Ø2	502 544		
18	3	Mutter M6	M6	502 278		
17	1	Träsk 0M 2500	Ø2/8"	501 814		
16	1	Prugg	Ø2/8"	505 661		
14	1	Styrcylinder 40/20		20 173 06		
13	1	Hydraulisk	1/2"	30 173 08-3070		
12	1	Nippel CELN 3/8	1/4"	502 328		
11	1	Koppfångblock	150x60	20 173 10		
10	1	Tryckmät 3000 - förret. 50bar totalret.	1/4"	503 206		
9	1	Träsk	1/8"	502 472		
8	1	Luftnippel	1/8"	40 140 07		
7	1	Träsk 0M 2500	1/2"	501 271		
6	1	Adapter 1/4"/1/2"	1/2"	501 272		
5	4	Träsk 0M 2500	1/4"	502 430		
4	2	Manometeransl. In-ut	1/4"-1/4"	502 291		
3	2	Manometer 263, 0-400bar	1/4"	502 194		
2	1	Träsk 0M 2500	1"	500 282		
1	1	Akkumulator 8102 10L	Len 1360	20 173 23		

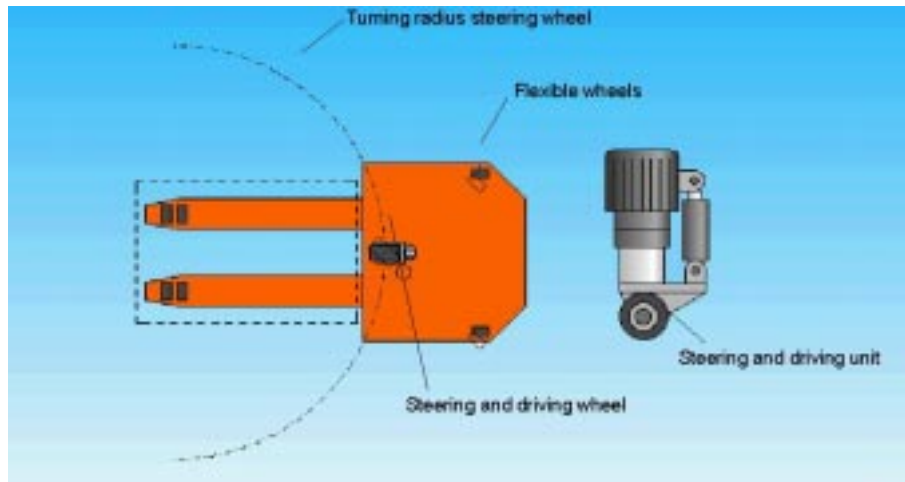
Pos. Ant. Beskrivning Material Dimension Drifttryck/Temp.

ABB Balanseringssystem
Dop-in PM2D2

SPURTSÄKERHETSGULLENER AUB 10 173 05 H

Viking Fork Lift

This application uses a gas spring to provide the force needed to keep the steering driving wheel in firm contact with the ground.



snöp	ändrad frn	Datum	Sgn.
Det	verifierad till Vellum CAD	350707	TW
1	-2675 inf.	960419	VC

Anslutningsport

ø35

ø75

ø100

ø35

25

L min
180 + Slagl

Slagl

Tot. L⁺⁰
180 + (2 x Slagl)

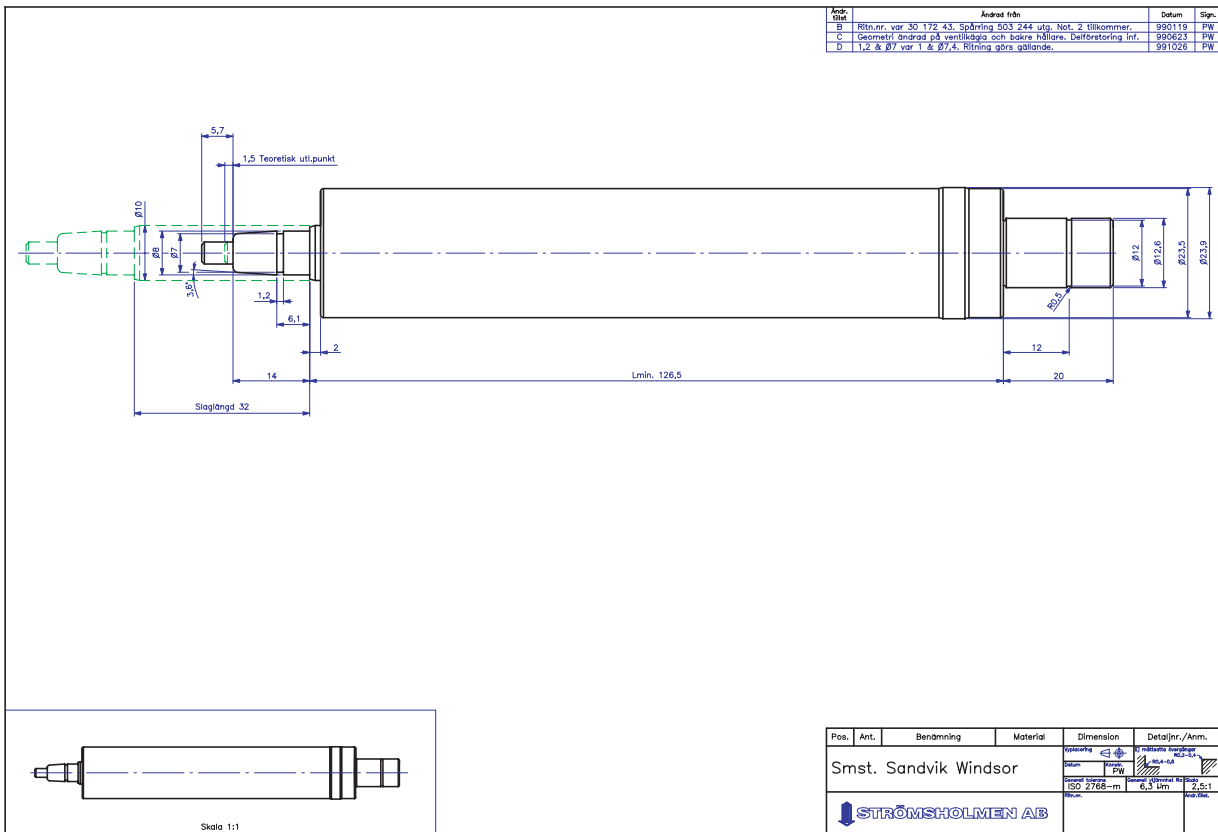
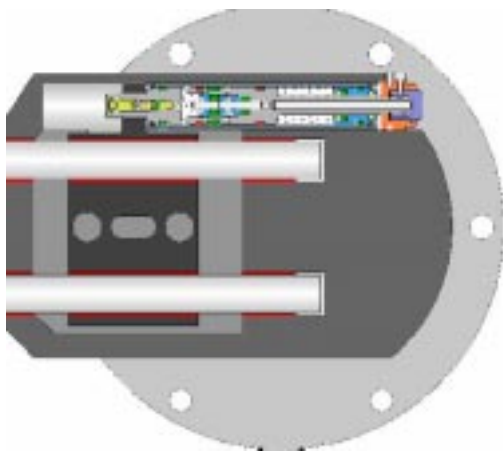
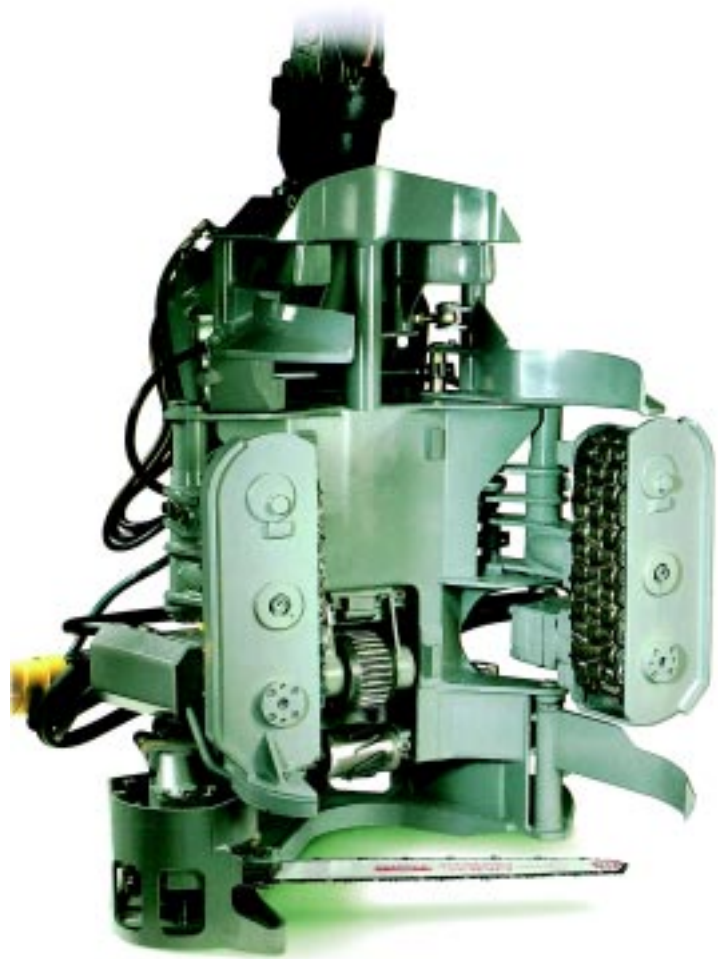
3. Mått: Grundffrg - Gul - AD 201-1001
Tskfng - Svart - BG 180-S013
2. Pos. 3 leas med löc-öle 242.
1. Tekniska data och stycklista enligt 20 139 76.

20 139 75 - 3000	300	480	780	30 143 96 - 3000	30 154 49 - 3000
- 2700	270	450	720	- 2700	- 2700
- 2675	267,5	447,5	715	- 2675	- 2675
- 2500	250	430	680	- 2500	- 2500
- 2000	200	380	580	- 2000	- 2000
- 1800	180	360	540	- 1800	- 1800
- 1600	160	340	500	- 1600	- 1600
- 1500	150	330	480	- 1500	- 1500
- 1250	125	305	430	- 1250	- 1250
- 1000	100	280	380	- 1000	- 1000
- 8800	80	260	340	- 8800	- 8800
- 0750	75	255	330	- 0750	- 0750
- 0635	63,5	243,5	307	- 0635	- 0635
- 0500	50	220	280	- 0500	- 0500
- 0381	38,1	218,1	256,2	- 0381	- 0381
20 139 75 - 0250	25	205	230	30 143 96 - 0250	30 154 49 - 0250
Detalnummer	Slagl, mm	L, min.	Tot. L	Pos. 1 Kolveting	Pos. 2 Mantel

3	1	ra			30 117 16-02
2	1	Mantelr			Se tabell
1	1	Kolveting			Se tabell
Pos	Ant.	Benämning	Material	Dimension	Detaljr./Anm.
***** E] mittstata vargiger rundas max. R. 0,5 (yttra) samt max. R 0,8 (ötra)					
TEE 1500 Smet.			Datum: 30 117 16-02 Skapad: 30 117 16-02 Rev: 1:1 Dimension: 1500 2785 mm Vikt: 75 kg Artikelnummer: 20 139 75 G		
STRÖMSHOLMEN AB			20 139 75		I

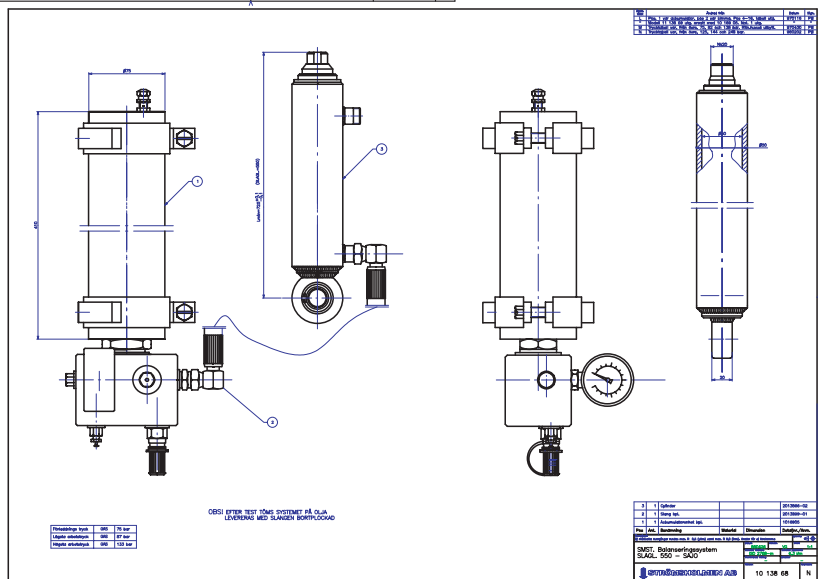
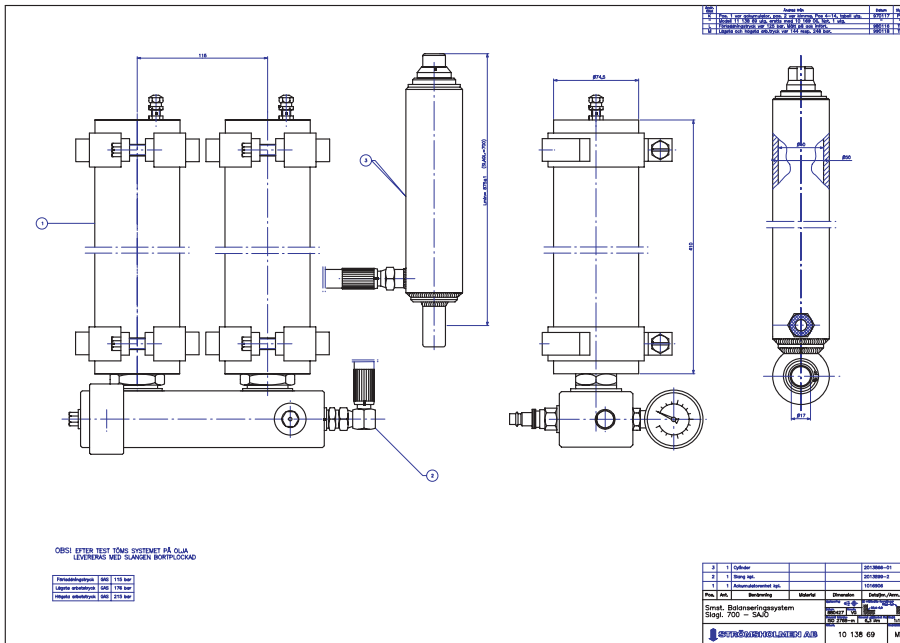
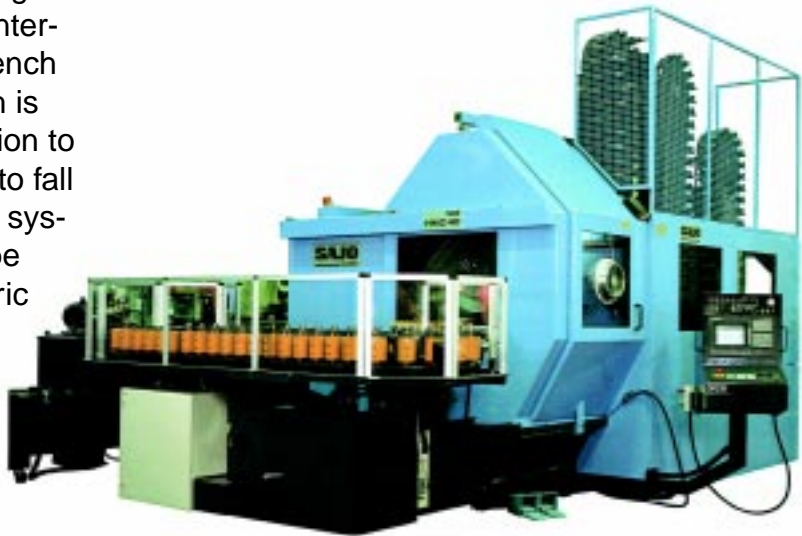
Sandvik Windsor "chain saw"

A lockable gas spring is used here to adjust the chain tension in a chain saw used for felling and cutting timber.



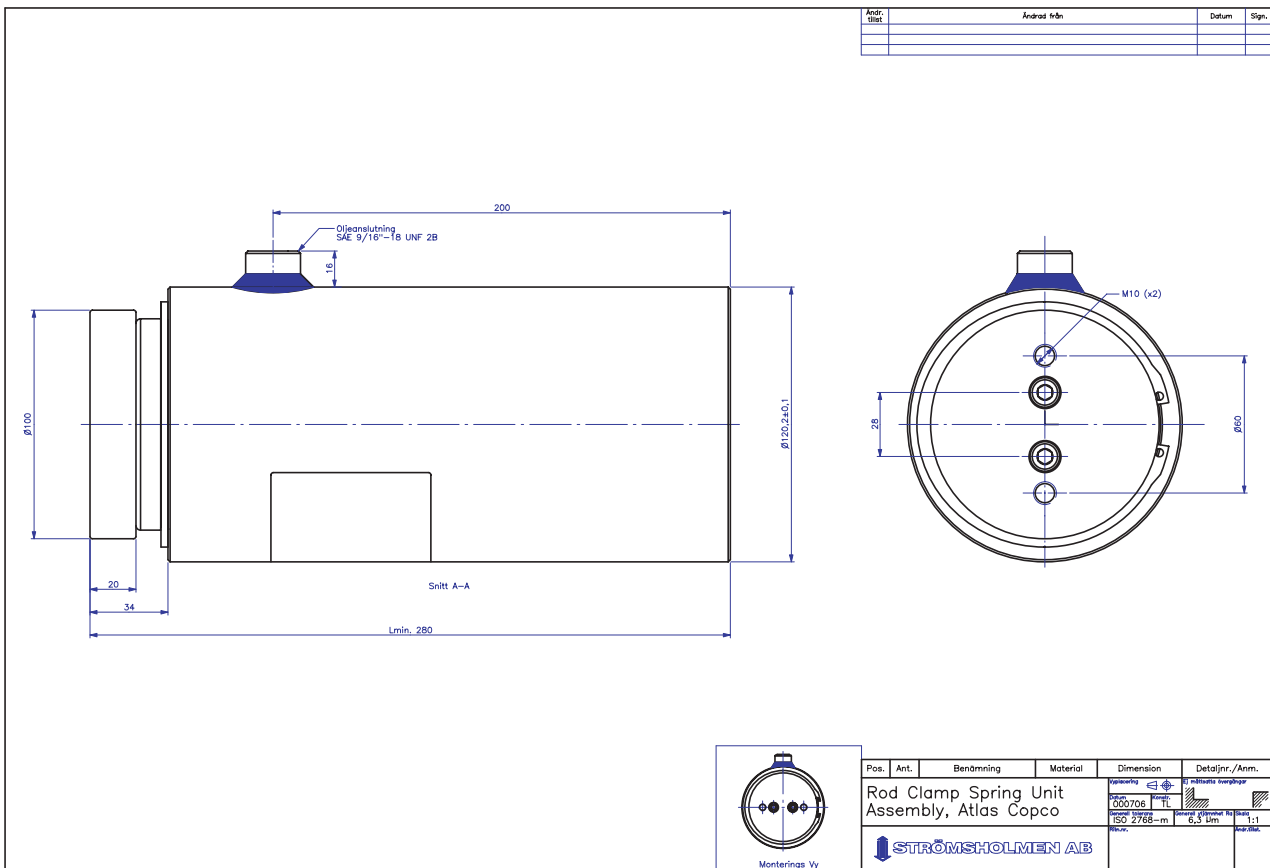
Sajo machine “workbench”

This multi-task machine uses a gas/hydraulic spring system to counter-balance the weight of a workbench in the X and Y directions, which is lean to one side during operation to enable metal chips and debris to fall away from the work piece. This system allows the workbench to be easily moved using small electric motors.



Atlas Copco “drilling machine”

This application is a combined gas/hydraulic system. Oil is pumped in to one side of the piston head to suppress the force acting from the compressed gas on the other. The gas pressure provides the clamping force required to hold the drilling rods in place in this drilling equipment.



HIFAB 500 "conveyor belt"

This application use a gas spring to counterbalance the weight of a conveyor belt. The gas spring allows the belt to be raised or lowered using a small electric motor. For hygiene reasons, the conveyor belt must be washed daily and so this gas spring unit is completely corrosion resistant.

Ändr. tillst.	Ändrad från	Datum	Sign.

Pos	Ant.	Benämning	Material	Dimension	Detaljn./Anm.
9	1	Kolvstång (Se not. 2)			30 148 24-1000
8	1	Rör (Se not. 2)			31 142 13-1000
7	1	Saxpinne			503 155
6	1	Pinnbult			40 170 39
5	1	Framre fäste kpl.			503 154
4	1	Bricka			503 153
3	1	Bult			503 152
2	2	Insex-skruv			503 151
1	1	Bakre fäste			40 170 37

Not:
 1. Pos 6 läses med loctite.
 2. För övriga detaljer som ingår i gasfjäder se stycklista 20 157 03.

Övergångar		Ej mättsatta övergångar rundas max. R 0,5 (yttre) samt max. R 0,8 (inre). Grader får ej förekomma.		Skala	
Datum	Konstr.	FW		x:x	
970402		FW		x:x	
Generell tolerans		Generell yttre mått			
ISO 2768-m		6,3 µm			
Överordnad ritning		Ersätter			
Ritn.nr.		Ändr./tillst.			
STRÖMSHOLMEN AB		30 170 38		-	



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