



# TSV-30

## TECHNICAL CHARACTERISTICS

Exciter model:	SV-30
Peak force:	300,6 kN (67 580 lbs)
Piston area:	145,3 cm <sup>2</sup> (22,53 inches <sup>2</sup> )
Reaction mass:	5045 kg
Maximum amplitude of reaction mass motion:	110 mm
Extreme frequency range:	1 to 250 Hz
Servo valve type:	Atlas 240H with pilot MOOG 760C928A and servo doctor
Control block type:	GDS-1+ (OOO «GDS»), VE-432 («Sercel»), FORS III, or equivalent
Hydro-pneumatic accumulators of reaction mass:	2 x 5 l (1,3 gl) mass collector
Stroke of hydraulic cylinders of lifting and lowering:	100 cm ( 38,5 inches)
Reaction mass weighting method:	Air bellows
Method of vibration dampening for the machine operator:	Air bellows
Hydraulic system:	Closed-type
Hydraulic system pump:	Denison P-14, 229 cm <sup>3</sup> (14 inches <sup>3</sup> )
Max. pump delivery:	7,5 x 10 <sup>-3</sup> m <sup>3</sup> /sec (450l/min)
Hydraulic system filters:	3 micron on servo valve and high pressure line, 5 micron on low pressure line
Hydro-pneumatic accumulators:	4 x 10 l
Working fluid temperature in the hydraulic system:	
-rated:	323 <sup>+5</sup> °K (50 <sup>+5</sup> °C)
-maximum:	397 <sup>+5</sup> °K (90 <sup>+5</sup> °C)
Hydraulic system working fluid:	
-winter at ambient t° range from -40°C to +10°C:	Oil Shell TELLUS S2 V32 (or equivalent)
-summer at ambient t° range from +10°C up:	Масло Shell TELLUS S2 V46
Baseplate area:	2,5 m <sup>2</sup> (3,864 inches)
Baseplate weight:	1970 kg

## TRANSPORT BASE

Chassis type:	TSV-301
Engine:	YaMZ-7511.10. 400 h.p. capacity at 1900 rpm
Qty of tracks:	4
Track width:	1500 mm
Tread:	2460 mm
Suspension:	oscillating beam type
Qty of supporting wheels:	8
Distance between axles of two adjacent wheels:	1400 mm
Tires:	air 12,00-20 - Model IYa-241
Tire air pressure:	750±25 kPa (7,5±0,25 2 kgf/cm <sup>2</sup> )
Max. gradability angle:	60% (31°)
Max. side movement angle at sidehill:	10°
Max.speed:	
-At 1st gear:	5 kmph
-At 2nd gear:	20 kmph
Working fluid pressure:	
-In discharge line of hydrostatic transmission circuit:	38 MPa (380 kgf/cm <sup>2</sup> )
-In return line:	2,8 MPa (28 kgf/cm <sup>2</sup> )
Source weight with air tires, max:	34500 kg
Overall dimensions:	
-length:	11910 mm
-width:	4000 mm
-height (at the level of the engine exhaust pipe):	3800 mm