

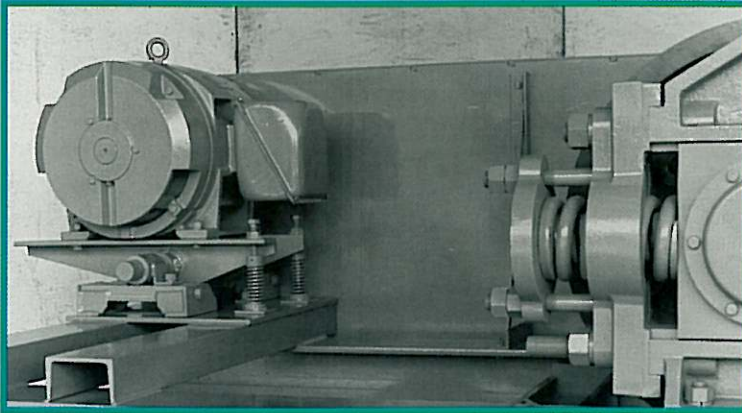
24C Smooth Roll Crusher

STEELE SMOOTH ROLL CRUSHERS

We use the word SMASHING or FLATTENING as being descriptive of the action of a Smooth Roll Crusher. Where there are plastic lumps in a clay, or where the whole clay body is plastic, the characteristic discharge from a Smooth Roll Crusher will be thin, flat DISCS, STRIPS, or even SHEETS of material in which everything has been reduced to the thickness of the Roll setting, but which hold together because of the nature and moisture content of the material. Except where plasticity is indeed extreme, these discharge formations have been badly fractured internally, and subsequent pugging is usually sufficient to break them down. But in unusual circumstances, or where the absolute maximum reduction is required of a material that cannot be screened, it is common to utilize a PRIMARY Disintegrator, then a Smooth Roll Crusher, and finally a SECONDARY Disintegrator (with very closely set rolls) to break up the plates, strips, or sheets, before they go on to the next step in the process.

IBC 24C

SMOOTH ROLL CRUSHERS

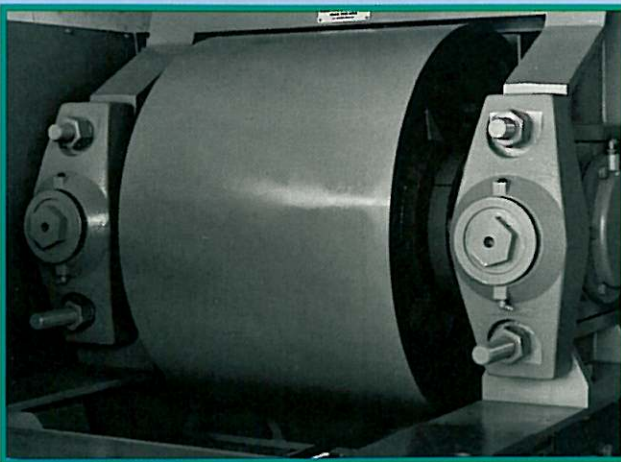


Slow Roller

Turning approximately 280 rpm (*) the 28PC Chrome Alloy renewable Shell 32" (813 mm) O D by 24" (610 mm) or 18" (457 mm) face width is SPRUNG to permit uncrushable objects to pass through without damaging the machine. Belt tension is maintained by the automatic adjusting motor base.

Fast Roller

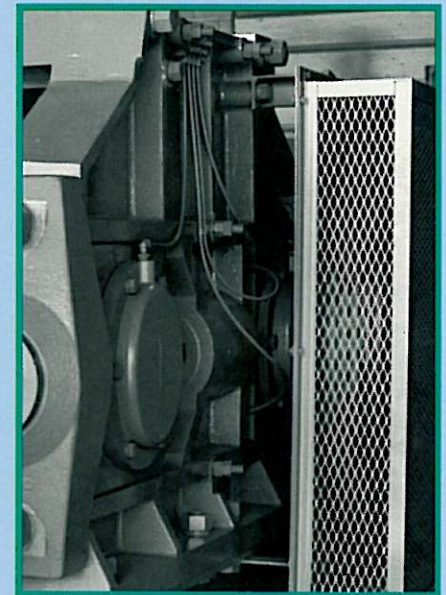
Approx. 290 rpm (*) with 28PC Chrome Alloy renewable Shell identical with Slow Roller. This Roller is FIXED, not SPRUNG.
(*We have found that a slight difference in rpm gives additional shearing action and facilitates self-cleaning of the surface of the Roll Shells.



Roll spacing is controlled by an external screw adjustment with stops each 0.010" (0.254 mm). A detent is provided at each point.

A Smooth Roll Crusher, with both Rollers properly maintained to a smooth, true surface, and kept set closely at a minimum of about 1/16" (1,6 mm), will smash pebbles, lumps, etc., sufficiently to cause them to blend in with the clay mass and thereby become unobtrusive.

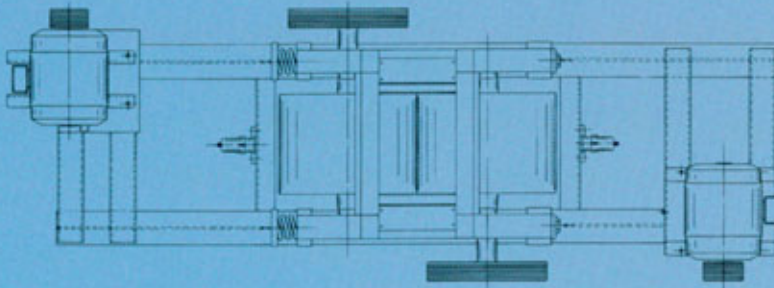
It should be remembered that the efficiency of a Smooth Roll Crusher depends entirely upon the maintenance of a TRUE, FLAT surface on both Rollers. They must be set closely at all times to the maximum particle dimension desired. This requirement necessitates surface grinding of these Rollers. We recommend the maintenance of spare Smooth Rollers, already mounted on Centers and a Shaft, which can be resurfaced easily at a machine shop, and then can be traded for worn Rollers as frequently as required. We offer these Smooth Roller Shells in our 28PC Chrome Alloy, which greatly lengthens the time between resurfacing.



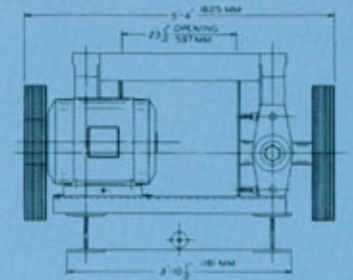
Both Rollers are equipped with a spring-loaded steel scraper. A lubrication manifold is provided on each side of the machine. The BEARINGS are spherical-roller, self-aligning and are grease lubricated. CASTINGS, other than wearing parts, all are DUCTILE (SG) iron and are virtually unbreakable. MAXIMUM LUMP SIZE (entering): hard particles (***) preferably minus 1/4" (6.4 mm); softer particles up to 2" (51 mm). The maximum particle size at discharge depends upon ROLL SETTING, 1/16" (1.6 mm) minimum, and upon straight, true surfacing of the Roll Shells.

(***) Where occasional extremely hard particles are encountered, such as flint rock or pebbles, the Roll Shells can be Manganese Steel, which are unbreakable and can be built up almost indefinitely by welding, and then resurfaced.

DIMENSIONS

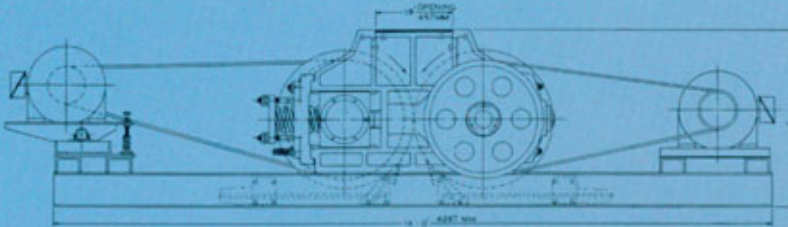


24C Smooth Roll Crusher - Top View

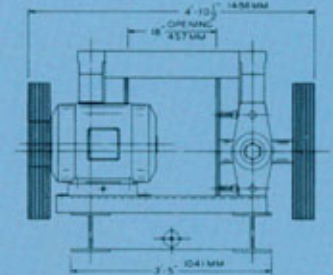


24C Smooth Roll Crusher - End View

Weight: 13,500 lbs.



18C and 24C - Side View



18C Smooth Roll Crusher - End View

Weight: 12,000 lbs.

Capacities

With Rolls at Minimum Spacing:

24C Crusher

Motors:

2-20 HP x 900 rpm 40-50 TPH

2-30 HP x 900 rpm 60-70 TPH

18C Crusher

2-15 HP x 900 rpm 30-40 TPH

2-20 HP x 900 rpm 40-50 TPH

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