BUILT FOR PERFORMANCE.
BUILT TO LAST.

The result of customer input, innovative engineering and continuous product development. Roskamp flaking mills feature quality construction and materials throughout. The unique Roskamp square-bearing housing design assures accurate, consistent flaking and ease of operation.
Roskamp Champion’s Strategic Advantage
The ability to deliver to the customer the best “Value Package.” In other words, in the long-term, when all things are considered, we offer customers equipment and services that represent the lowest operating cost solution.

SPECIFICATIONS

FEATURES

Rolls
Flaking rolls are the heart of a flaking mill. Roskamp flaking mills utilize the finest rolls available in the world. All rolls are cast, machined and ground to the best technical specifications. Rolls are dynamically balanced at full operating speeds to minimize vibration and prolong bearing life.

Bearings
Bearings for all Roskamp flaking mills are double row, spherical roller, self-aligning bearings and are designed to last the life of the roll. Flaking roll bearings are grease lubricated, and all machines are designed so lubrication can take place with the machine in operation.

Shafts
Roll shafts are high tensile, high yield alloy steel. Roskamp flaking mill designs keep shaft lengths to a minimum to reduce overhung loads and keep bending moments to a minimum.

Scrapers
Free-floating scrapers are mounted in a cradle under the rolls. Tracks guide the scraper assembly in and out of the machine for ease of service. Scrapper pressure is applied through counterweights and is adjustable for a wide range of situations and applications. Scrapers are fully adjustable to ensure parallel contact with the flaking roll surface. Due to their simple design, the scraper blades are easy to replace.

Roll Closure Mechanism
Large diameter hydraulic cylinders apply the flaking force directly through the center line of the rolls and bearings. An 8” (200 mm) diameter cylinder ensures low operating pressure will be required even in the most demanding flaking applications. The double-acting hollow bore cylinder can also be used to fully open the rolls if desired to bypass material through the nip of the rolls. An engineered stack of disk springs protect the rolls from foreign material, yet are preloaded to maintain the desired flaking pressure in operation. Nitrogen-charged hydraulic accumulators dampen any high frequency vibration in the system.

Inter-roll (Differential) Drive
Inter-roll (differential) drive is accomplished through double-sided CC section V-belts. Differential ratios of 0%, 4%, 8% and 12% are available for the 2800 and 3200 machines. Ratios can be changed at any time using standard available hardware. A hydraulic tensioning system maintains proper belt tension at all times.

Bearing Housings, Base & Frame
The base frame is fabricated from heavy plate steel with double-wall box-type construction for superior strength. Flaking mill frame will not distort under full flaking pressures of up to 150,000 lbs. The base is filled with a high density aggregate to dampen the effects of machine and floor vibration. After welding, the flaking mill base frame is machined to ensure the rolls remain in tram for maximum flake quality and control. Roll separating forces are contained in interlocking front and rear pressure members and top tension members. All interlocking members are machined to maintain precise tolerances. Bearings are mounted in massive cast steel square bearing housings, and rest on machined bearing ways. Replaceable 1/4” cold rolled steel wear plates assure exacting roll positioning will be maintained through years of service.

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Main Drive & Motor Base
The main drive (motor to rolls) is provided through a synchronous (toothed) belt for maximum efficiency. The main drive can be configured as right-hand or left-hand drive in either C-flow or optional Z-flow configuration.

Feeders
The roll feeder is standard for oilseed flaking applications. Feeder roll design includes an aggressive deep corrugation for efficient feeding and long life. An adjustable feed gate regulates the flow of material into the flaking rolls, and ensures even feeding from end to end. The feed gate position is controlled by a manually adjustable stop (standard) or full feature remote position control (optional). The feeder roll is driven by an independent motor and reducer, and all feeder functions are integrated through the optional control console. Applying the roll pressure opens the feed gate and activates a pressure switch, starting the feeder motor. Switching off the roll pressure closes the feed gate and stops the feeder roll motor to positively stop the flow of material into the flaking rolls.

Hopper Agitator
A hopper agitator is standard on all models to break up any agglomerations in the incoming material and to ensure uniform distribution of the feed from end to end.