

# AF Apron Feeder



# Introduction

## Main features

- **The AF apron feeder has heavy-duty roller supports throughout the full length of the feeder and a double set of rollers in the impact area**
- **All rollers are fully automatically lubricated**
- **A hydraulic take-up system ensures perfect and consistent tensioning of the chain**
- **Two apron feeders can be combined to form a raw material blending system**

### Ideal for feeding crushers

The raw materials from the quarry are dumped directly into a reinforced feed hopper and extracted by the AF apron feeder. The coarse granular or fragmented run-of-mine materials often contain large pieces of hard limestone rock. The AF apron feeder ensures a steady flow of material to the next stage of the process, typically a crushing plant.

AF apron feeders come in different sizes dimensioned to feed even the largest FLSmidth crushers.

### Proven and reliable

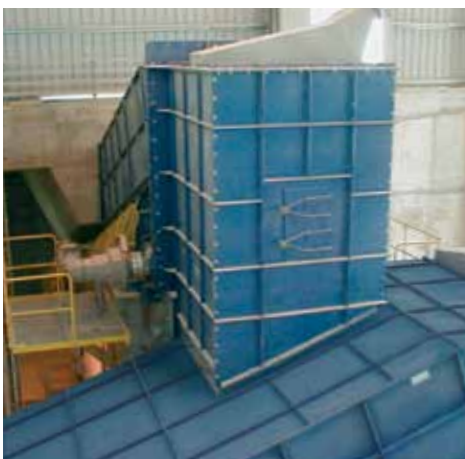
FLSmidth has supplied feeders for more than 65 years and continues to modernise their design to meet the demands of the industry.

Their rugged and reliable construction makes them easy to operate and maintain, and only a minimum of operator attention is required. The

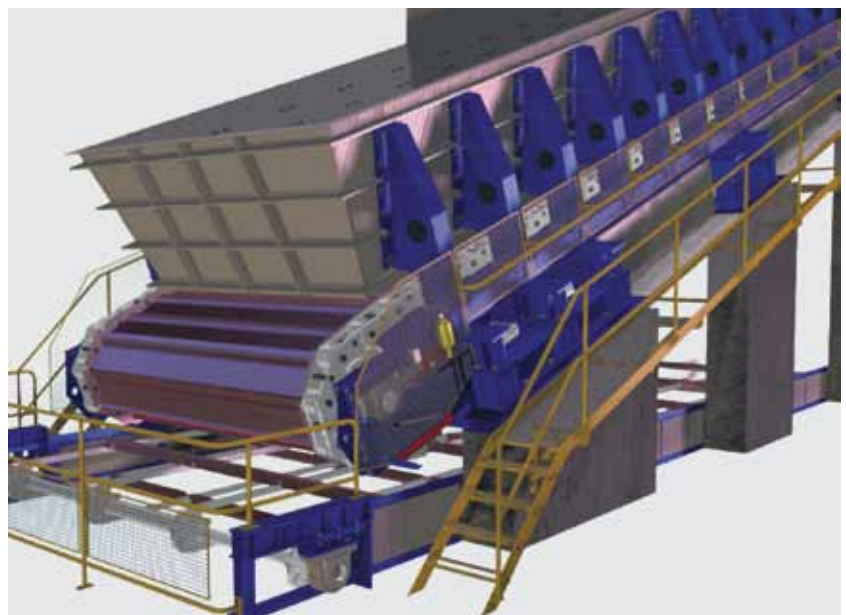
feeders are designed for uninterrupted service, year after year, and only need stopping for the occasional replacement of wear parts.



*Impact and supporting rollers are fitted below the aprons.*



*Blending and crushing installation with two apron feeders*



*The take-up station maintains constant tension of the chain.*

# Design features

## Robust construction

The feeder is built into a sturdy frame with rails. The rails carry the chains that have grease-lubricated rollers. The aprons are designed to deflect a little when hit by big rocks. The impact is absorbed by the aprons themselves and by impact rollers placed below the aprons. The impact rollers, which are lubricated by a central greasing unit, are designed to minimise friction and energy consumption.

## Effective take-up system

The take-up station, consisting of hydraulic cylinders and a manually operated pump, maintains constant tension of the chain. The system compensates for the polygon effect and effectively protects the chain, the bearings and other components.

The feeder is driven by a conventional frequency-controlled electric motor and a planetary reducer or by a hydraulic drive. For small feeders a

single drive will suffice, while large feeders require a double drive.

## Delivery tailored to site conditions

The feeder comes with a trough, a discharge casing and a chain scraper. The feeder can be installed horizontally or at an incline.

Depending on its size the feeder is either pre-assembled in the workshop and transported to the construction site as major components or it is delivered as one complete unit.

The type designation of the apron feeder, for example AF 2800 x 12, indicates its nominal width in mm and length in metres. Widths range from 1000 mm to 2800 mm based on various lengths.

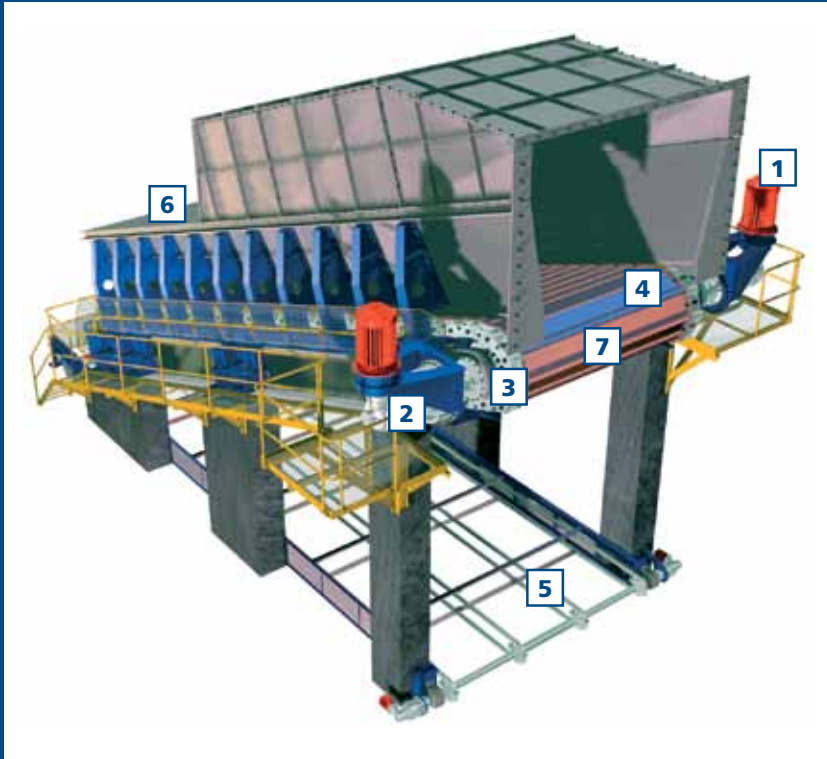
## Maintenance

Worn aprons and chains can be accessed from the takeup end of the feeder for easy replacement. The sprocket wheels have bolted-on tooth segments which can be interchanged or replaced. The impact rollers are lubricated by a central lubrication unit, while the chain rollers have to be lubricated manually with a grease gun.

## Blending and crushing in one installation

By positioning two apron feeders perpendicular to each other it is possible to feed the same crusher with two different materials at the same time. This option combines comminution and blending in one installation.





- 1 Motor
- 2 Reduction gear
- 3 Chain
- 4 Aprons
- 5 Scraper chain
- 6 Feed inlet
- 7 Discharge



Copyright © 2010 FLSmidth A/S. ALL RIGHTS RESERVED. FLSmidth is a (registered) trademark of FLSmidth A/S. This brochure makes no offers, representations or warranties (express or implied), and information and data contained in this brochure are for general reference only and may change at any time.

[www.flsmidth.com](http://www.flsmidth.com)

#### Project Centre Denmark

FLSmidth A/S  
Vigerslev Allé 77  
DK-2500 Valby  
Copenhagen  
Tel: +45 3618 1000  
Fax: +45 3630 1820  
E-mail: [info@flsmidth.com](mailto:info@flsmidth.com)

#### Project Centre USA

FLSmidth Inc.  
2040 Avenue C  
Bethlehem, PA 18017-2188  
Tel: +1 610-264-6011  
Fax: +1 610-264-6170  
E-mail: [info-us@flsmidth.com](mailto:info-us@flsmidth.com)

#### Project Centre India

FLSmidth Private Limited  
FLSmidth House  
34, Egatoor, Kelambakkam  
(Rajiv Gandhi Salai, Chennai)  
Tamil Nadu – 603 103  
Tel: +91-44-4748 1000  
Fax: +91-44-2747 0301  
E-mail: [indiainfo@flsmidth.com](mailto:indiainfo@flsmidth.com)

