## Datasheet

# **Compact Pellet Mill**

Van Aarsen designs, produces and supplies Compact Pellet Mills for the toughest of applications. Hundreds of Compact Pellet Mills are world-wide in use; for example in the animal feed industry, wood pelleting, DDGS pelleting, sugar beet pulp pelleting, soy bean meal pelleting and for pelleting of various residues (pulp) of the food industry. Pellets can be produced in several diameters and densities, depending on the specific application.

The Van Aarsen Compact Pellet Mill range consists of five types: C500, C600, C750, C900 and C900XL. Depending on the product that has to be pelletized and the required pellet size, the capacity ranges from 1 up to 60 tons per hour.

#### Features of the Compact Pellet Mill

- Low energy consumption
- · High capacity with good pellet quality
- Excellent durability
- Low maintenance costs
- Large effective die surface
- · Possibility to select the optimal die velocity
- Quick fit<sup>®</sup> die change system
- Two-stage power transmission system, consisting of a Vbelt drive, intermediate shaft and tooth-belt drive to guarantee optimal energy efficiency and possibility to use optimal die speed
- Build according to latest regulations and standards for safety and hygiene



#### Design

- Hygienic operation in the pelleting line is achieved in combination with the Van Aarsen Long Term Conditioning systems (LTC and LTV), a heated and insulated pellet mill door and hot air sanitation system
- Ergonomic design
  - Large doors with safety provisions enable easy access to all vital parts of the pellet mill
  - $\circ\;$  Hoist and toolset are provided, for replacement of die and rollers
  - Automatic lubrication of the roller and main shaft bearings
- Unique hydraulic operated Quick-fit<sup>®</sup> system enables fast and proper die changes
- Enhanced user friendliness
  - o Pellet mill control system with 10,4" touch screen
  - o Integrated hoist for dies and rollers
  - Automatic roller adjustment for safe and easy adjustment of the gap between die and rollers
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  - Self-cleaning temperature probe in the meal inlet
- Robust forged steel main shaft
- Pellet mill door in stainless steel
- Conical die seating with die holder wearing ring
- Magnet in the inlet funnel to protect the pellet mill
- Integrated by-pass valve in the inlet funnel
- Heavy duty bearings on the main shaft
- According to CE safety regulations

#### **Design options**

- Hydraulic roller adjustment (see page 3)
- Slow turning device on the die holder (see page 3)
- Motor operated hoist for dies and rollers (see page 3)
- Pellet mill door heated and/or insulated
- · Sound insulation of the pellet mill
- · Fat spray on the die
- Automatic load control of the pellet mill
- Pelleting line automation and operator control system with 10,4" touch screen
- Several conditioning options for hygienic safety and quality improvement of the pellets
- Hot air system
- Self-cleaning temperature sensor
- Integrated 2<sup>nd</sup> by-pass in case heat treated mash is produced
- Up to 4 pellet knives possible





		C500	C600	C750	C900	C900XL	
Die Inside diameter	mm	500	600	750	900	900	
Pelleting width	mm	190	225	250	175 / 225 / 275	325	
Pelleting area	cm <sup>2</sup>	2.985	4.220	5.890	4.948 / 6361 / 7.775	9.189	
Velocity at 50 Hz	m/s	4.7/6.0/6.7	4.9/6.2/7.4	5.1/5.8/6.2/7.7	4.7/5.3/6.7/7.0/8.4/9.4	7.0/8.4/9.4	
Velocity at 60 Hz	m/s	5.6/7.2/8.0	5.9/7.5	6.1/6.9/7.4	6.4/7.1/8.0/8.5	6.4/7.1/8.0/8.5	
Rollers Quantity		2	2	2	2	2	
Diameter	mm	240	285	360	435	435	
Main motor							
1500 rpm 50 Hz	kW	75/90/110/132	110/132/160	132/160/200/250	200/250/315/355	315/355/400	
1800 rpm 60 Hz	kW	86/103/126	126/152	152/184/230	230/285/360	285/360/405	
Weight (static/dynamic)	kg	4.600 / 7.130	5.600 / 8.150	7.645 / 11.210	10.500 / 16.000	00 11.250 / 17.000	



#### Motor operated hoist

- Reduces the downtime for changing dies and rollers
- Can also be used to position the main shaft after a shear pin breakage

#### Remark:

The C900 and C900XL pellet mill are standard equipped with a motor operated hoist



### Slow turning device

- Reduces the downtime for changing the die to a minimum
- Used to position the die holder for alignment with the die, enabling easy and fast mounting of the die



#### Hydraulic roller adjustment

- Enables easy finding the right roller gap with just the touch of a button
- Enables the operator to adjust the roller gap, even when the pellet mill is in operation

#### Remark:

By using the right roller gap, the die and roller lifetime can be increased, while also achieving a higher pellet quality











Туре	Dimensions for sketch mm												
	A	B	C	D	E	F	G	H		J			
C500	1774	1800	800	600	400	1400	140	1060	1200	1360			
C600	1852	1875	850	650	375	1500	140	1160	1300	1460			
C750	2160	2015	925	725	365	1650	170	1330	1500	1660			
C900	2250	2457	1200	800	457	2000	220	1480	1700	1840			
C900-XL	2250	2457	1200	800	457	2000	220	1480	1700	1840			
	K	L	Μ	Ν	0	Р	Q	R	S	Т			
C500	95	192	1150	304	385	45	230	205	1910	570			
C600	75	187	1200	304	440	45	230	205	1910	570			
C750	100	192	1300	304	485	75	230	205	2410	580			
C900	150	212	1470	340	505	75	230	205	2410	710			
C900-XL	150	262	1470	340	555	75	230	205	2410	710			



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