

PE ball valve **Production process**

This infographic illustrates the complete production process of PE Ball valves at the production facility of AVK Syntec.

#1 Incoming inspection

before processing.

The raw materials are extensively tested on e.g., melt flow rate (MFR), oxidation induction time (OIT) and moisture content prior to be released for further processing. AVK Syntec ball valves.

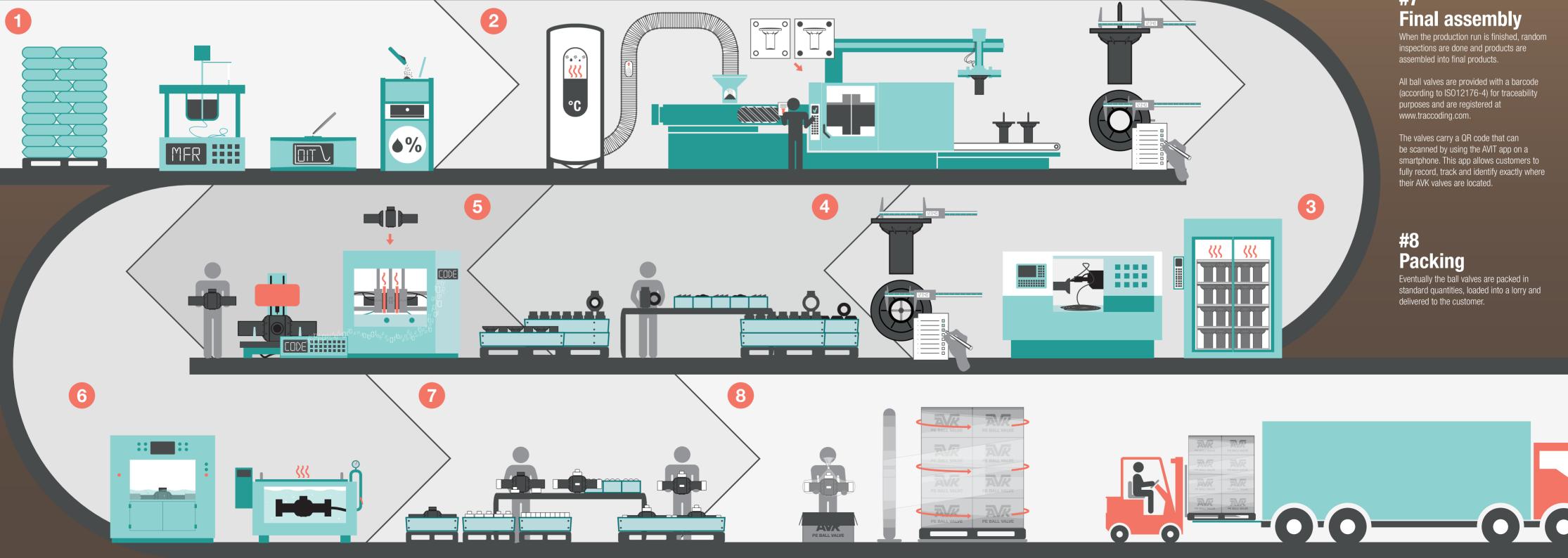
#2 **Injection moulding**

After QA has approved and released the synthetic material it will be dried in designated dryers and can be used for injection moulding. A first batch of products is made and thoroughly checked on appearance, dimensions, weight and colour prior to releasing it for full production.

After the first batch is approved full production can be started. Raw materials are processed into bodies, spigots, balls, stems and other essential parts of the valve.

#3

After annealing the components are machined to size. The machined parts have a relaxation time of twelve hours and are subsequently inspected before they are pre-assembled.





Machining

The moulded components go through a special heat treatment process for stress relief and dimension stability called annealing.

#4 **Pre-assembly**

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During pre-assembly all bodies and balls are manually assembled together with several other parts. The operator performs a 100% visual inspection.

#5 Welding

in a modern butt-welding machine. Directly after welding a unique serial number is generated by the welding machine and dotmarked onto the body.

has to be conditioned for twenty-four hours before the next step is initiated.

#6 **Batch release** testing

worldwide leading standards such as EN1555-4, ISO4437-4. EN12201-4, GIS/ V7-2 and GB15558.3.

The batch release testing consists of leak tightness, hydrostatic strength and operating torque tests. Checking dimensions, appearance, colour and marking completes the testing.

#7