

PPM (Parts per million)

Through continuous improvements and a powerful investment program for control equipment, we have reduced the number of defects to our customers. Our supplier development has contributed to that more and more of our suppliers:

- Are quality certified.
- Are environment certified.
- Work with statistic process controls.
- Work with vision-inspection (Zero-defect control with cameras).

Thanks to these measures and well-educated staff Mattssons has reached a quality level of approximately 500 defect articles per million (PPM). Normally 600-1500 PPM is accepted for fasteners.

The most common reason for high PPM values is foreign articles from washing, hardening, surface conditioning and packing.

Most customers can without any objections accept 500 PPM.

For those customers with automatic assemblage in large series, 500 PPM is completely unacceptable.

Example: If a customer assembles 20 000 screws per day and the batch has a PPM value of 500 it means that there is 10 defect parts in the batch. This causes 10 stops in the automatic assemblage. If each stop takes 5 minutes to correct it will take 50 minutes each day to rectify. The cost will be enormous.

By using zerodefekt control in modern machines it is possible to reach a PPM value below 50.

For more information please see the section about zero defect control machine on page 103.

Quality certificate

The products that we present in our catalogue are standard products, which means that all characteristics are prescribed in national or international standards.

By choosing the right supplier we can also deliver standard products with quality certificate according to the table below. The following certificates can be obtained:

Table 80 Statement of test certificates

Denom.	Certificate	Type of check and test	The contents of the certificate	Delivery directions	The certificate is signed by
2.1	Identity certificate 2.1	Non-specific	No test results	As per contract of sale and if needed, also according to official regulations and corresponding technical regulations	Manufacturer
2.2	Quality certificate 2.2		Test results based on non-specific control and testing		
3.1	Inspection certificate 3.1	Specific	Test results based on specific control and testing	As per contract of sale and if needed, also according to official regulations and corresponding technical regulations	The manufacturer's authorised representative who is independent from the manufacturing department
3.2	Inspection certificate 3.2			As per contract of sale	The manufacturer's authorised representative who is independent from the manufacturing department and the buyer's authorised representative

All quality certificates should be ordered together with products.

2.1 can be issued by Mattssons, others are ordered and are obtained from Mattssons's suppliers.

Source: EN 10204.

* Prices are quoted on request by our sales department.