

EnerSys	GLOBAL MANAGEMENT SYSTEM	PROPRIETARY DOCUMENT
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DOCUMENT TITLE:	PPM CALCULATION METHOD	SUPERSEDES: NEW CHANGE NO: 1002342

Calculation of the ppm rate for production direct material from external Suppliers

- SQRR (Supplier Quality Reject Rate) is calculated for each supplier by expressing the ratio of rejected quantity received divided by total quantity received for the time period, expressed as a ppm (part per million)
- Calculation formula:

$$\text{SQRR} = \frac{\text{Total Rejected Quantity of Units} \times 1000000}{\text{Total Received Quantity of Units}} \text{ (ppm)}$$
- Definitions:
 - ppm** - parts per million
 - SQRR** - Supplier Quality Reject Rate
 - Units** - the base unit of measure in which orders are placed (e.g. item, kilogram, meter, liter, etc.). The sum of all base units of measure is used. Separate calculations are not to be carried out for different base units of measure unless defined in an alternative way.
 - Total Rejected Quantity of Units** - number of units which deviate from specification (drawing, regulation etc.) or where a deviation exists in the accompanying documentation (e.g. in dimensional reports or certificates). Account must be taken of all units found deviated at incoming inspection, production, testing, and customer.
 - Total Received Quantity of Units** - number of units supplied during the period under review.
- ppm relevance and counting method

Process	Description	Counting method	ppm relevant
Deviation at Supplier	Units deviated from specification but covered by Deviation Request submitted by Supplier and approved by EnerSys prior to receipt of goods	No ppm	NO
Deviation at EnerSys	Units deviated from specification, not covered by Deviation Request approved by EnerSys prior to receipt of goods.	Total number of units deviating.	YES
Sorting rework and scrapping at EnerSys	Units deviated from specification found after sorting which are unusable and cannot	Total number of units deviating and scrapped or reworked.	YES

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	be reworked (scrap) or are usable after being reworked.		
Return to Supplier	Units returned to Supplier for sorting, scrapping, or rework.	Total number of units returned to Supplier.	YES

5. Calculation period

- Deviating units found in delivery month, should be included in delivery month rate (e.g. deviating units delivered in May and found in May should be reported in May rate)
- Deviation units not found in delivery month but in following months should be included in rate of month when are found (e.g. deviating parts delivered in May, found in July, should be reported in July rate).

6. Levels of SQRR calculation

Description	Level	Responsibility	Reporting
Supplier	Regional	Regional Supplier Quality Engineer	Monthly
	Global	Global Commodity Leader	Monthly
Commodity	Regional	Regional Supplier Quality Engineer	Monthly
	Global	Global Commodity Leader	Monthly
SQM suppliers	Regional	Regional Supplier Quality Manager	Monthly
Top offenders	Regional	Regional Supplier Quality Manager	Monthly

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Revision History*

Revision	Release	By	Description of Change	CHANGE NO.	Committed Change
AA	10/13/2021	M.JARNOT	INITIAL RELEASE	ECO 1002243	No

*Note – Revision History is always the last page.