

# Tolerance Limits, Release Order Analysis, and More: How Automotive Suppliers Recognize Demand Fluctuations in an Instant

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Recognizing at an early stage, whether a customer violates the specified tolerance limits when retrieving delivery quantities or whether their release order behavior has changed is a business-critical factor for automotive suppliers. With *SPEEDI*, suppliers who use SAP software, can perform release order checks and analyses as well as purchase quantity checks in SAP. The process is integrated and IT-supported, and with that, efficient and transparent. Material planning and production planning can be adjusted promptly.

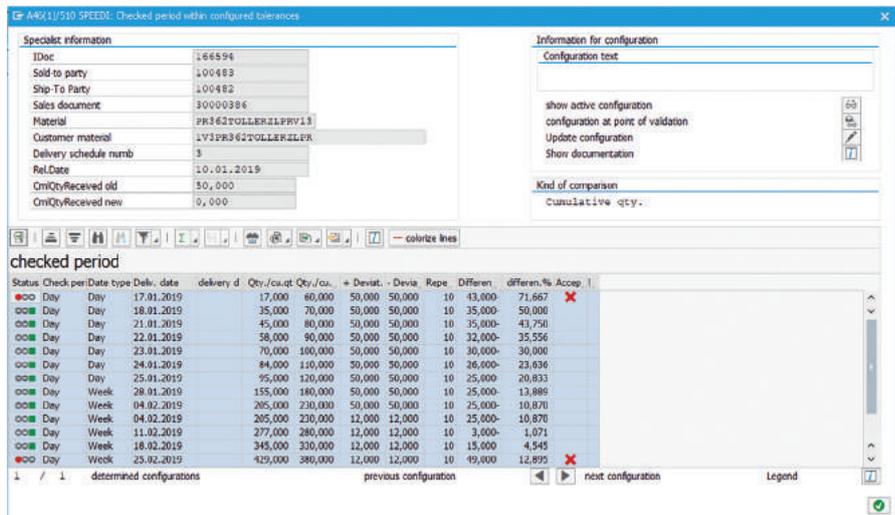
Since the beginning of September 2018, new passenger cars may only be registered and sold in the European Union (EU) if they have been tested for traffic per the WLTP (Worldwide Harmonized Light-Duty Vehicles Test Procedure). This causes a registration backlog for new cars. Automobile manufacturers (OEMs) therefore reduce production or discontinue specific model variants.

## Recognizing Fluctuations in Demand Early

This also affects the suppliers. Admittedly, supply contracts with the OEMs usually specify exactly what partial quantities a supplier must deliver when, and which the customer then requests by way of forecast delivery schedule or shipping release order. Frequently, however, there are fluctuations in demand when retrieving, for example, due to the WLTP test, which has an adverse effect on material planning and production planning at the supplier. Therefore, certain tolerance limits are usually agreed concerning the retrieval of parts or components.

It is therefore critical for the supplier to recognize at an early stage whether current release orders violate the defined tolerance limits – preferably directly when the release orders are entered. Ideally, it should also always be possible to understand the development of the release order behavior of the customer. Significant deviations can then be identified immediately, and material planning can be adjusted promptly so that a “smooth” production is still guaranteed.

Another critical aspect for smooth material requirements and production planning is full control of production and material releases as well as the agreed minimum and maximum purchase quantities. Material releases allow purchasing to plan ahead for about six or eight weeks. Production releases oblige the OEMs to accept the components produced by



Status	Check per	Date	type	Deliv. date	delivery d.	Qty./cust	Qty./cu.	+ Deviat.	- Devia	Repe	Differen	differen.%	Accop.
o	Day	Day		17.01.2019	17,000	80,000	50,000	50,000	10	43,000	71,667		X
o	Day	Day		18.01.2019	35,000	70,000	50,000	50,000	10	35,000	50,000		
o	Day	Day		21.01.2019	45,000	80,000	50,000	50,000	10	35,000	43,750		
o	Day	Day		22.01.2019	58,000	90,000	50,000	50,000	10	32,000	35,556		
o	Day	Day		23.01.2019	70,000	100,000	50,000	50,000	10	30,000	30,000		
o	Day	Day		24.01.2019	84,000	110,000	30,000	30,000	10	26,000	23,636		
o	Day	Day		25.01.2019	95,000	120,000	50,000	50,000	10	25,000	20,833		
o	Day	Week		28.01.2019	155,000	180,000	50,000	50,000	10	25,000	13,889		
o	Day	Week		04.02.2019	205,000	230,000	50,000	50,000	10	25,000	10,870		
o	Day	Week		11.02.2019	277,000	280,000	12,000	12,000	10	3,000	1,071		
o	Day	Week		18.02.2019	345,000	330,000	12,000	12,000	10	15,000	4,545		
o	Day	Week		23.02.2019	429,000	380,000	12,000	12,000	10	49,000	12,895		X

The *SPEEDI* solution Tolerance Line Check checks already during entry of a release order, whether or not it exceeds or falls short of the tolerances specified with regard to demand fluctuations. Violations are detected early, and prompt responses are possible.

the supplier in advance for a certain period of time, for example for four weeks.

## More Efficiency through IT-supported Processes

Whether during the verification and analysis of forecast delivery schedules or the control of production and material releases as well as purchase quantities: Suppliers using SAP software face the challenge that the SAP Standard does not or only insufficiently supports these processes. Consequently, the processes are performed manually and costly outside of SAP, in Microsoft Excel, in-house-developed programs or even on paper.

The solution is provided by the *SPEEDI* platform from WSW Software, which integrates seamlessly with the SAP software, extends the SAP Standard without modification and closes existing gaps. For this purpose, the add-on provides solutions, using which the above-mentioned and numerous other logis-

tics processes can be handled throughout and in an IT-supported manner in SAP, and thus very efficiently and transparently.

## Checking Forecast Delivery Schedules during Entry

The *SPEEDI* Tolerance Line Check, for example, automatically checks data from incoming forecast delivery schedules against previous release orders during entry into SAP. Traffic light functions signal immediately whether a delivery schedule quantity exceeds or falls below the specified tolerance limits. Necessary actions can be promptly initiated, such as a processing stop of the forecast delivery schedule or the transmission of the deviation to the customer.

## Release Performance Analyses Available at the Touch of a Button

The *SPEEDI* solution Analyses of Release Performance with Aggregation takes an important

Status	Details	Info	Sales document	Item	Material	ABC	Material Description	Plant	Unrestricted	Avg.Deviat.	Curr. deviation	Dev.min	Dev.max	UoM	AvgValVa
			30000386	10	PR36ZTOLLERZLPRV13			1100	0	16,947	266	-40	105	PC	169,47

Div. schedule	W_03.2019--Release quantity	W_03.2019--Difference quantity	W_03.2019--difference percent	W_03.2019--value variance	W_03	W_04.2019--Release quantity	W_04.2019--Difference quantity	W_04
7	83	63	315	630,00	EUR	122	72	PC
6	73	53	265	530,00	EUR	115	65	PC
5	65	45	225	450,00	EUR	91	41	PC
4	36	16	80	160,00	EUR	63	13	PC
3	35	15	75	150,00	EUR	60	10	PC
2	20					50		

The *SPEEDI* solution Analysis of Release Performance with Aggregation provides suppliers with insight, whether a customer has violated tolerance limits during release orders, or if their release order behavior has changed gradually over a longer period of time. This information is given per scheduling agreement or across scheduling agreements as well as on a daily, weekly or monthly level.

step further. It analyzes the release performance with regard to customers or material on a daily, weekly or monthly level across all scheduling agreements, making it completely transparent. The solution displays the release performance either at the customer or material level or for SAP scheduling agreements.

The analysis results are available at the touch of a button and visualized graphically on a monitor. Significant violations of the tolerance limits for specified delivery schedule quantities, whether on a quantity or value basis or by percentage, are recognized immediately. Scheduling and production planning can be adjusted promptly, which smooths the processes along the value chain.

### Processing Incoming Release Orders Quickly

Thanks to the qualified analysis of the release order behavior, the supplier is at the same time optimally prepared for discussions with the customer and can substantiate arguments with facts in price negotiations. Since the verification of release orders is automatic and therefore easy and fast, deviations are quickly recognized, and the supplier can react promptly.

A significant advantage of the *SPEEDI* Analysis of Release Performance with Aggregation is

the aggregated view on release orders. This way, it can be understood, whether release orders of a customer change gradually over time. They do not necessarily violate the tolerance limits but can equal out or amplify in total following the bull-whip effect. The analyses also allow conclusions regarding the release performance in the future, which allows even better and more accurate material requirements and production planning.

### Controlling Releases Efficiently

Another *SPEEDI* solution supports the verification of the production and material releases sent with a forecast delivery schedule. It compares the release period specified in the current release order with the agreed times as well as the time periods from the previous release order. The agreements necessary for the comparison with the current release periods are stored in special *SPEEDI* tables since this is not possible in the SAP Standard.

Whether agreed minimum and maximum purchase quantities are exceeded or undercut in a certain period can be determined with the *SPEEDI* solution Min-Max Check with regard to scheduling agreements, materials, and material groups. Traffic lights indicate violations of minimum or maximum values and warn of a shortfall in the mini-

mum order quantity or a capacity bottleneck in production because the maximum quantity has been exceeded.

The examples illustrate: If release order and production and material release verifications, release order analysis or purchase quantity checks are performed in SAP fully IT-supported, efficiency and transparency in these processes increase significantly. This is a competitive factor not to be underestimated. ■

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