

System/Equipment	Wheels manufactured by RAFIL (Bochumer Verein Verkehrstechnik GmbH)
Safety issue description	<p>The train 41200 on the 03.17.2017 in Giulianova station has been stopped for intervention of the hot box detector device. During the inspection of the train it has been detected the breaking of the lower part of the wheel body with missing part of the rolling plane (as shown in the images in the annex 1).</p> <p>The EVN of vehicle involved is 336849544992 - keeper VTG Schweiz GmbH and ECM VTG Rail Europe - registered in Germany and the latest revision is being carried out on 10.29.2014. The manufacturer of the wheel is RAFIL (Bochumer Verein Verkehrstechnik GmbH), the year of construction is 2004, the iron casting number of the wheel is n. 21657 (the manufacturer of original wheelset is Bonatrans, the new wheels was installed in the 2005).</p> <p>Previously, during technical inspections on other trains were detected cracks on wheels of the vehicles:</p> <ul style="list-style-type: none"> • EVN 83854561015-9, whose the keeper and ECM is Hupac SA of Chiasso. The crack has partially affected the running surface of the wheel, transversely to the wheel as shown in the images in the Annex 1 and Table B, also in the Annex 1, describes the characteristics of the wagon and the wheelset interested. • EVN 33854575322-4 whose the keeper and ECM is always the Hupac SA of Chiasso (see images and Table C in the Annex 1). <p>According to the information, given by the Railway undertaking concerned, the manufacturer of both wheelsets is RAFIL (Today Bochumer Verein Verkehrstechnik GmbH). Further tests, carried out in the workshop on both vehicles, did not provide useful information to the identification of the causes that led to the problem. The wheelset of vehicle EVN 83854561015-9 was also sent to the laboratories of the Bochumer Verein Verkehrstechnik GmbH manufacturer for the specific investigation. The test made have not, however, provided useful information to understand the causes of the crack. Hupac SA identified all the vehicle of its fleet (103) in which are used wheelsets type BA 004sa with wheels of RAFIL SA manufacturer, produced with materials from the iron casting n. 007039 and n. 096558. For all these wagons Hupac SA decided precautionary to send them in the workshop for replacing the wheelsets belonging to the iron casting mentioned above. To travel in direction to the workshop It was decided the vehicles will circulate empty and isolated by the braking action. Italian NSA asked to the railway undertakings to:</p> <ul style="list-style-type: none"> • increase the checks on these wheelsets and those which may be assimilated, • considering they are responsible for its part of the system and its safe operation, adopt any measures needed to ensure the safe operation, communicating directly to the NSA any detected defect. <p>Italian NSA asked to the Keepers to examine if on their vehicles were used wheels belonging to the above mentioned iron casting numbers or type very similar to the wheels interested, activating all the necessary</p>

	<p>checks with the ECM and railway undertakings involved.</p> <p>At the moment cannot be excluded that there are vehicles from other keepers concerned by this topic running in the European rail network. The causes of breakage have not yet been identified but it can be assumed a connection with wheels overheating phenomena.</p>
Circumstances	
Reason for issue	The incidents mentioned in the safety alert can occur again, since has not been identified the causes and removed the associated risk
List of supporting documents	Annex I with summary tables for each event and photos
Linked with occurrence notified to ERA database?	NO
Link to ERA notification	-----
Occurrence date	17/03/2017
Organisation	Italian NSA (Agenzia Nazionale per la Sicurezza delle Ferrovie)
Contact data	<p>telephone number : 0039 0552989719</p> <p>e-mail address: rocco.cammarata@ansf.gov.it</p>