

In 2006 the line, which runs through some spectacular scenery, carried around 370,000 passengers, and is very popular with tourists to the district. The SSIF is now adding to their **fleet** three panoramic four-car EMUs, built by Officine Ferroviarie Veronesi. Two are already in service, though they are at present running as three-car trainsets. The third train, and two more intermediate „R“ trailers, will be delivered in October 2007. Formation is Mp + Mi + R + Mp - in other words, the end cars and one intermediate car have powered bogies.

Bodyshells consist of a steel framework, with 1.5 mm thick steel panels, and can withstand an end-on impact of 70 kN at bufferbeam level without sustaining damage. Pantographs are mounted on the end cars. The end car at the Domodossola end of each **trainset** has a first class saloon and a WC designed for use by handicapped passengers, while the powered intermediate trailer has a WC cubicle of ordinary dimensions. All the bogies are manufactured by SKODA at the latter's works in Pízeň, and SKODA is also supplying all the electrical equipment. The three-phase asynchronous traction motors are mounted on the central beams of the bogies, and power both axles. Primary suspension consists of rubber/metal elements, while the secondary system involves the use of



Abe 4/Pp-083 at Domodossola depot, with 081 standing on the far left.

## New Centovalli Panoramic EMUs

Running 54 km from the heart of Locarno in Switzerland to a terminus underneath the FS station at Domodossola in Italy, the metre gauge Centovalli or Vigezzina railway (named after the valleys it follows in the two countries) was inaugurated in 1923 and is electrified at 1,350 V DC. Nowadays the operators are Ferrovie Autolinee Regionali Ticinesi (FART) in Switzerland and Società Subalpina di Imprese Ferroviarie (SSIF) in Italy, and an intensive service of stopping and semi-fast trains is operated, connecting with services on the Gothard and Simplon corridors.

helicoil springs and hydraulic dampers. Transversal rubber coils and buffer restrictors are also fitted to reduce yaw. Each axle is fitted with a brake disc, while each bogie also has two electromagnetic brakes. Each wheel has its own individual sander and sand box.

For summer 2007 three panoramic train pairs per day are being **operated**, using the two new trains plus, until October, a refurbished Class Abe 8/8 EMU. A 1.50 EUR supplement is charged for travel on these services, which are proving very popular indeed, and offer a higher standard of travelling comfort than that on earlier Centovalli stock.



Armin Schmutz

Photos by author on 4 June 2007

### Principal Technical Data

Track Gauge	1,000 mm
Operating Voltage	1,350 V DC
Maximum Speed	70 km/h
Tractive Force Mp1 + Mp2/Mp1 + Mi + Mp2	81.3/122 kN
Continuous Rating Mp1 + Mp2/Mp1 + Mi + Mp2	680/1 020 kW
End Car Length	16,250 mm
Intermediate Car Length	15,550 mm
Maximum Width	2,650 mm
Height Over Rail Level	3,400 mm
End Car Weight in Working Order	32 t
Intermediate (Mi) Car Weight in Working Order	30.5 t
Seats	200



New Centovalli EMU 082 crossing a viaduct near Trontano, while forming a special train to Santa Maria Maggiore.

