Subject: Re: Anyone Familiar with the Onken Cabinet Alignment?
Posted by GM on Fri, 04 Nov 2005 01:18:09 GMT
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Greets!You're welcome!There are different 'Onken' designs, with the most visible being the Jensen Ultraflex 'clone', which in turn is derived from Thuras's 1932 bass reflex patent. Yes, Jensen 'killed two birds with one stone' WRT wanting a vent area = driver Sd and brace the cabs well too boot. Factor in using 3/4" void free plywood and cleat reinforced joints and all that's left is to add a brace/support system for the heavy driver(s) and some stuffing to damp down the harmonics of the (summed) large vent. The Onken 'W' OTOH is just a large reflex with standard vents, but it's 'claim to fame' is sand filled double wall construction to damp the cab's resonance.The 416-8A articles with plans/ measurement:
http://ebenisterie.musique.free.fr/RDS/Divers/Audiophile1977.pdf
http://ebenisterie.musique.free.fr/RDS/Divers/Audiophile1982.pdf How big any cab needs to be is dependent on the driver's specs, total system impedance, and the desired F3, Fb, so this alignment may not be suitable for your app.. For example, SS amp driven 416-8C Onken alignment (n = 6.34): Net Vb ~10.5 ft^3/~35 Hz F3, Fb with overall dims: 36.5" h x 23.5" w x 26.38" d. Driven with a 300B: Net Vb ~19.5 ft^3/~26 Hz F3, Fb with overall dims: 36.5" h x 40.13" w x 26.38" d.Folks tout the big vents increased bass output, but they don't mention the downside, which is the chopped up response above the cab's BW where their harmonics comb filter with the driver's lower mids output if not properly damped, which of course damps down the extra gain, and then some. Bottom line, Onken's got the sexy look, but a simple